

# Asimov's

MARCH 2008

## SCIENCE FICTION®

### Following the Pharmers

Brian Stableford

Elizabeth Bear

Tom Purdom

Steven Utley

### Master of the Road to Nowhere

Carol Emshwiller

\$4.99

0 3



0 74820 08621 6

[www.asimovs.com](http://www.asimovs.com)

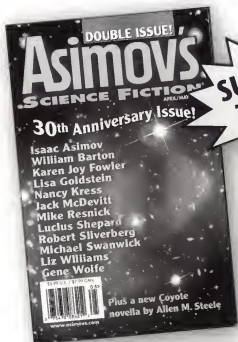
# DON'T MISS AN ISSUE!

Subscribe today and have every intriguing issue of entertaining science fiction delivered direct to your door!

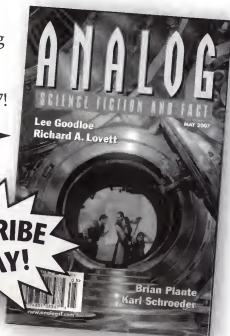
## Analog Science Fiction and Fact

An unbeatable combination of stimulating fiction stories, provocative editorials, and fascinating articles, all solidly rooted in science fact. 1 year (12 issues\*), just \$32.97!

Visit [www.analogsf.com](http://www.analogsf.com) →



**SUBSCRIBE TODAY!**



**Asimov's Science Fiction**  
Novellas and short stories from the leading science fiction and fantasy writers. Plus, candid, no-holds-barred book reviews and guest editorials. 1 year (12 issues\*), just \$32.97!

← Visit [www.asimovs.com](http://www.asimovs.com)

To order by charge card, call  
**TOLL-FREE: 1-800-220-7443** (8am - 7pm EST)

or mail your name, address, order, and payment to:

**Dell Magazines Direct**  
6 Prowitt St., Suite S • Norwalk, CT 06855-1220

Please allow 4 to 6 weeks for delivery of your first issue. Outside U.S.A.: Add \$10 per year for shipping and handling (U.S. funds). WA residents: Add state and local taxes to your total order. \*We publish double issues twice a year which count as four issues toward your subscription. Offer expires 12/31/08.

47C-NSFSL

**Asimov's Readers Save 20%\***

## **Can the Aremac Project Stop the Terrorists in Chicago?**

"From its first provocative premise to its explosive ending, **THE AREMAC PROJECT** is a novel to read and remember. . . . an intriguing plot . . . warmth and humanity leavened with humor."

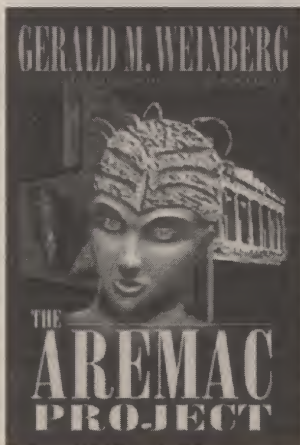
—**Susan Mayse**, author of *Awen* (EWU Press)

"double-dealing agents, atypical terrorists, and a dash of humour. . . . sit back, hold on, and enjoy the final run home. . . . a feast of ideas that come at a pace that is sure to keep the pages turning."

—**Peter Sykes**, *Sci-Fi Lists*

"slam-bang near-future action-adventure. Technology, love, and the underpinnings of our society intersect in Weinberg's fast-paced story."

—**Jay Lake**, author of *Mainspring* (Tor Books)



Sci-Fi Techno-Thriller

### **The Aremac Project**

by GERALD M. WEINBERG

ISBN: 978-0-932633-70-5

©2007 368 pages Reg. \$17.95

[www.littleWESTpress.com](http://www.littleWESTpress.com)

**\* Order today and take  
20% off—pay only  
\$14.36 + shipping. Call  
(800) 342-6657 for more  
information.**

# Asimov's<sup>®</sup>

## SCIENCE FICTION

MARCH 2008

Vol. 32 No. 3 (Whole Number 386)

Next Issue on Sale March 4, 2008

Cover Art by Tomasz Maronski

### NOVELETTES

- 18 FOLLOWING THE PHARMERS ..... BRIAN STABLEFORD  
58 SHOGGOTHS IN BLOOM ..... ELIZABETH BEAR  
84 SEPOY FIDELITIES ..... TOM PURDOM  
114 MASTER OF THE ROAD TO NOWHERE .... CAROL EMSHWILLER

### SHORT STORIES

- 44 KALLAKAK'S COUSINS ..... CAT RAMBO  
55 THE WORLD WITHIN THE WORLD ..... STEVEN UTLEY  
74 THIS IS HOW IT FEELS ..... IAN CREASEY  
108 SPIDERS ..... SUE BURKE

### POETRY

- 11 SNOW ANGELS ..... RUTH BERMAN  
43 THE CAPACITY OF COLD ..... ROGER DUTCHER  
82 MUSHROOM AGRICULTURE ..... DAVID C. KOPASKA-MERKEL  
107 CLASSICS OF SCIENCE FICTION:  
"THE COLD EQUATIONS" ..... JACK O'BRIEN

### DEPARTMENTS

- 4 EDITORIAL: PANNING FOR GOLD ..... SHEILA WILLIAMS  
8 REFLECTIONS: SPACE JUNK FOR SALE .... ROBERT SILVERBERG  
12 ON THE NET: MUNDANE ..... JAMES PATRICK KELLY  
136 ON BOOKS ..... PETER HECK  
142 THE SF CONVENTIONAL CALENDAR ..... ERWIN S. STRAUSS

*Asimov's Science Fiction*, ISSN 1065-2698, Vol. 32, No.3, Whole No. 386, March 2008, GST #R123293128. Published monthly except for two combined double issues in April/May and October/November by Dell Magazines, a division of Crosstown Publications. One year subscription \$55.90 in the United States and U.S. possessions. In all other countries \$65.90 (GST included in Canada), payable in advance in U.S. funds. Address for subscription and all other correspondence about them, 6 Prowitt Street, Norwalk, CT 06855. Allow 6 to 8 weeks for change of address. Address for all editorial matters: *Asimov's Science Fiction*, 475 Park Avenue South, New York, N.Y. 10016. *Asimov's Science Fiction* is the registered trademark of Dell Magazines, a division of Crosstown Publications. © 2008 by Dell Magazines, a division of Crosstown Publications, 6 Prowitt Street, Norwalk, CT 06855. All rights reserved, printed in the U.S.A. Protection secured under the Universal and Pan American Copyright Conventions. Reproduction or use of editorial or pictorial content in any manner without express permission is prohibited. All submissions must include a self-addressed, stamped envelope; the publisher assumes no responsibility for unsolicited manuscripts. Periodical postage paid at Norwalk, CT and additional mailing offices. POSTMASTER, send change of address to *Asimov's Science Fiction*, 6 Prowitt Street, Norwalk, CT 06855. In Canada return to Quebecor St. Jean, 800 Blvd. Industriel, St. Jean, Quebec J3B 8G4.

Printed in CANADA



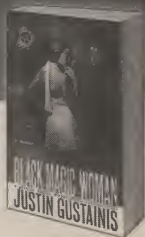
AVAILABLE FROM ALL GOOD BOOKSTORES NOW



*"Black Magic Woman is the best manuscript I've ever been asked to read. Keep an eye on Justin Gustainis. You'll be seeing more of him soon."*

Jim Butcher

*Black Magic Woman* marks the start of an electrifying new series of supernatural thrillers following the exploits of paranormal investigators as they search out evil in the darkest corners of America...



For more information and free first chapters visit  
**WWW.SOLARISBOOKS.COM**

## PANNING FOR GOLD

One of the special rewards of my job has been a growing appreciation for the creative imagination of *Asimov's* readers. For me, the most obvious result of this energy is that you are responsible for a large percentage of manuscripts that make their way to our office. I think that at least 10 percent of *Asimov's* readers are currently trying their hands at writing. I suspect that over the years *Asimov's* editors have seen stories at one time or another from at least 20 to 30 percent of you—perhaps even more. I hope those of you who would rather spend more of your free time quilting, duck hunting, or *reading* short stories will bear with me as I use this editorial to talk about how important this output of unsolicited manuscripts is to the magazine. After all, when they become the content of *Asimov's*, some percentage of these stories will eventually be shared with all of you.

New writers are the lifeblood of the magazine. Rarely does an issue go by that doesn't include at least one person's first sale to *Asimov's*. There are cases (such as Edward M. Lerner, a long-standing *Analog* author, whose first story for us appeared in our last issue), where I'm already familiar with the work of the author from his or her previous sales to other SF outlets. Others (such as Merrie Haskell and Nick Wolven, whose stories are appearing in our next issue) will be authors whose work is completely un-

known to me. In each instance, though, these stories caught my attention and held it all the way through. They were tales that I enjoyed and believed you would find rewarding as well.

It might seem as though it could be easy to become complacent about buying stories for *Asimov's* and rely solely on the work of the established professional. The work of authors like Robert Reed, Nancy Kress, Michael Swanwick, Kristine Kathryn Rusch, and others seem to appear so regularly in our pages that readers and struggling new authors can be forgiven if they think of them as *Asimov's* reliable stable. I, on the other hand, could not be forgiven for entertaining those same thoughts. I know that long-standing authors depart unexpectedly to write novels. If the novel doesn't divert them, they may find their time consumed by child-rearing responsibilities and by the hours needed for career building in occupations unrelated to fiction writing. In addition, there is the hard truth that not every story written by the well-known author is going to appeal to me or be right for *Asimov's*.

Despite my claims to open-mindedness, however, I know that the attempt to break into the field or into a particular market is a frustrating one for most new writers. While I can only publish seventy to eighty tales a year, I receive thousands of submissions during the same time period. It's unlikely that

# Asimov's<sup>®</sup>

## SCIENCE FICTION

ISAAC ASIMOV

Editorial Director (1977-1992)

**SHEILA WILLIAMS**

Editor

**BRIAN BIENIEWSKI**

Managing Editor

**MARY GRANT**

Editorial Assistant

**VICTORIA GREEN**

Senior Art Director

**IRENE LEE**

Production Artist

**CAROLE DIXON**

Senior Production Manager

**EVIRA MATOS**

Production Associate

**ABIGAIL BROWNING**

Manager Subsidiary Rights  
and Marketing

**BRUCE W. SHERBOW**

Vice President of Sales  
and Marketing

**PETER KANTER**

Publisher

**CHRISTINE BEGLEY**

Associate Publisher

**SUSAN KENDRIOSKI**

Executive Director, Art and  
Production

**SANDY MARLOWE**

Circulation Services

**JULIA McEVOY**

Manager, Advertising Sales

---

**ADVERTISING REPRESENTATIVE**

**CONNIE GOON**

Advertising Sales Coordinator

Tel: (212) 686-7188

Fax: (212) 686-7414

(Display and Classified Advertising)

---

**Stories from *Asimov's* have won 44 Hugos and 25 Nebula Awards, and our editors have received 18 Hugo Awards for Best Editor.**

---

Please do not send us your manuscript until you've gotten a copy of our manuscript guidelines. To obtain this, send us a self-addressed, stamped business-size envelope (what stationery stores call a number 10 envelope), and a note requesting this information. Please write "manuscript guidelines" in the bottom left-hand corner of the outside envelope. The address for this and for all editorial correspondence is *Asimov's Science Fiction*, 475 Park Avenue South, New York, NY 10016. While we're always looking for new writers, please, in the interest of time-saving, find out what we're looking for, and how to prepare it, before submitting your story.



more than a quarter of the stories that I do publish will be from new authors. This past fall at the World Fantasy Convention in Saratoga Springs, New York, I had a long talk with Leslie J. Howle, the director and co-administrator of Clarion West Writers Workshop. She mentioned that some Clarion graduates felt discouraged by the odds of a new writer selling a story to a professional market.

Well, the odds can be very discouraging, but writing a story and sending it in to a science fiction magazine is not the same thing as buying a lottery ticket. In the latter instance there is a certain probability that you will win the jackpot. Depending on how many people enter a lottery, these odds may range from tiny to miniscule, but statistically, the odds will be the same for every ticket purchased. This is clearly not the case for the writer. Some authors may sell to me on their first attempts. At the other extreme, I met an author at World Fantasy who had been submitting stories to *Asimov's* for about twenty-five years before finally selling one to us a couple of years ago. For myriad reasons, some authors will never tell a story that appeals to me, while others will do so over and over again.

Still, as I said earlier, I don't rely on my familiarity with an author when I make choices for the magazine. I take the search for new stories very seriously, and I look over every submission that comes into the office. Whether you've had any sort of professional experience or not, I enjoy reading your cover let-

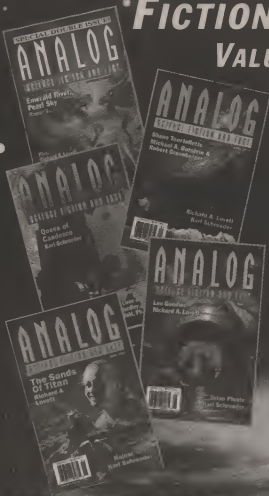
ters. I like learning about who you are, the research you've put into the story, or your connection to the magazine. Some of my colleagues advise against listing semi-professional sales, but I am not adverse to reading about your hard-earned writing credits. There are many discerning professional and semi-professional editors working in science fiction and its related fields. Three sales to *Bloody Fang Magazine* may not tell me that you know how to write an SF story, but it often does indicate that you know how to construct a tale. Ultimately, though, the cover letter isn't essential because the story will have to sell itself. Just last week, I purchased a story sans cover letter from an author I'd never heard of.

It may sound like a cliché, but it's still true that every professional author had to start somewhere. Not long ago, Jack Skillingstead was completely unknown to our readers. I had never heard of either Ian Creasey or Ted Kosmatka when I purchased their first stories for *Asimov's*. Since then, I've bought enough material for each of them to qualify for a SFWA membership on the strength of their *Asimov's* sales alone.

I'm delighted and heartened that we consistently find promising new writers, but I have no intention of taking that good luck for granted. I'll continue to enjoy getting to know you and appreciating the time and effort that you put into each story at the same time as I look hungrily over your tales for the next exciting *Asimov's* debut. ○



# TOUR THE UNIVERSE WITH THE **ANALOG** SCIENCE FICTION AND FACT VALUE PACK!



Order today and enjoy an unbeatable combination of stimulating fiction stories, provocative editorials, and fascinating articles, all solidly rooted in science-fact.

You'll get five of our most popular back issues for just \$6.95 plus shipping and handling. That's a savings of 60% off the regular price!

To order, just fill out the coupon below and mail with your payment today.

**SAVE 60%**

## DELL MAGAZINES

Suite SM-100, 6 Prowitt Street, Norwalk, CT 06855-1220



**YES!** Please send me my Analog Science Fiction Value Pack. I get 5 back issues for just \$6.95 plus \$2 shipping and handling (\$8.95 per pack, U.S. funds). My satisfaction is fully guaranteed! My payment of \$ \_\_\_\_\_ is enclosed.

(AFPK05)

Name: \_\_\_\_\_

(Please print)

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Please make checks payable to Dell Magazines Direct. Allow 8 weeks for delivery. Magazines are back issues shipped together in one package. To keep prices low we cannot make custom orders. Offer expires 12/31/08.

47C-NANVL1

## SPACE JUNK FOR SALE

It was going to be a grand and glorious adventure, remember? The dawning of a new Elizabethan Age of exploration: first the Moon, then Mars, then perhaps the moons of Jupiter and Saturn, and eventually the colonization of the stars. The late twentieth century and afterward would be the Age of Space. We all wrote stories about it, imagining what it was going to be like—Heinlein, Asimov, Williamson, Bester, Sturgeon, all the great writers of science fiction's golden age, and on and on through my own generation of writers to the winners of last year's Hugo and Nebula awards.

As we all know, most of yesterday's science fiction is still science fiction today. The Age of Space—by which we meant the era of manned space flight to far horizons—got as far as the Moon, back there in 1969, and after a handful of manned landings there we turned our backs on the whole enterprise and called it quits. Of course, things aren't going to stay that way. What we're going through right now is a sort of quiet interlude in that grand and glorious adventure, an odd little phase of inactivity, and sooner or later spacefarers from Earth will be heading outward again, bound for the sort of exploits I used to read about in *Planet Stories* and *Thrilling Wonder Stories* when I was a kid. The promise of the first moon landings is eventually going to be fulfilled, I have no doubt. But for the time being, not

much is going on for us along the frontiers of space.

Meanwhile we have *www.collectspace.com* and *www.hobbyspace.com* and *www.thespacestore.com* and *www.lovaura.com* as the bleak, ironic residue of the first phase of our grand and glorious Age of Space.

*Www.collectspace.com* and *hobby space.com* and the rest of them are web sites, just a few among many, that deal in space memorabilia, by which I don't mean merely back issues of *Astounding Science Fiction* and postage stamps depicting space satellites, but actual artifacts that have been to space. More than half a century ago, Robert A. Heinlein wrote a stirring novella called "The Man Who Sold the Moon," about a wily entrepreneur who sells mankind on the *idea* of voyages to the Moon—not so much for the romantic grandeur and gloriosity of it all as for his own personal profit. Heinlein himself, very much a romantic but also a free-market capitalist if there ever was one, and an energetic propagandist for space exploration, would be angered to learn that here in the twenty-first century, two decades after his death, we still haven't taken the first step beyond those early Moon landings. But I'm sure he'd find wry pleasure in the knowledge that *somebody* is cashing in on space exploration, if only by selling the detritus that our space flights so far have generated.

Consider: three or four years ago, a California auction firm called Aurora Auctions sold a brown M&M

candy that had traveled beyond the Earth's atmosphere aboard the privately financed SpaceShipOne. It went for fifteen hundred dollars. "It was flown on the very first mission," the head of the auction house said. "That's very important."

More recently, Aurora auctioned off the documentation concerning a urine-measuring system that was keeping track of astronauts' body functions on one of the Gemini missions of the 1960s. "Excellent condition," the auction catalog declared. "Answers those delicate questions."

The collector market for space junk is infinitely voracious. A toothbrush that Buzz Aldrin used during the Apollo 11 mission—that was the big one, the one that made the first landing—went for twenty-three thousand dollars. The same enthusiast—a retired New York lawyer—paid twenty-six thousand dollars for a flashlight and cord that went to the Moon with Apollo 15. Astronauts' autographs, of course, are always in heavy demand, and so are peripheral items like NASA tote bags and DVD recordings of press conferences involving Lisa Nowak, the hapless astronaut who was arrested a few months ago on charges of attempted murder growing out of a love triangle she was involved in. But the big action is in the precious items that fall into the "flown" category—artifacts that have been to space and back, and particularly those that have been to the Moon.

Most of this stuff gets into public hands because NASA doesn't consider it important enough to donate to the Smithsonian Institution's space museum. Everything aboard a space mission is carefully catalogued and the Smithsonian

gets first pick. Whatever is deemed superfluous—those flashlights and toothbrushes, etc.—is donated by NASA to other museums, or sold at government auctions. NASA employees are forbidden to sell space artifacts themselves, although plenty of items do get smuggled out. (Heinlein, that old free-enterpriser, probably would approve.) It's permissible for astronauts to sell their signatures and other memorabilia once they retire, and a lot of them do. And so, even though not much is going on right now in the way of space exploration, the stock of space junk that today's space entrepreneurs are offering for sale is constantly growing. If you Google up "space memorabilia," you'll find all sorts of sites peddling things like thermal tiles from the space shuttle, cell-phone holsters used by astronauts, parachute fragments from the Soviet Soyuz expeditions, and baseball caps that come with impressive-looking "flown in space" certificates of authenticity. (Certificates of authenticity are a major feature of this particular area of collecting.)

Some of the astronauts find this kind of mercantile activity distasteful, but most take a *laissez-faire* attitude. "It's business," said Alan Bean, the fourth astronaut to set foot on the Moon. "Isn't that the American free-enterprise dream, to buy something low and sell high?" On the other hand, Neil Armstrong, the very first man on the moon, no longer will sign autographs because he thinks the prices they fetch are obscenely high. Jim Newman, though, who was aboard the 2002 space-shuttle mission that repaired the Hubble telescope, signs autographs all the time, deliberately creating a huge supply to keep

prices low. "It's very important to acknowledge there are collectors of things in the world," he said. "When there is no one left who collects things about space flight, that's because space flight is no longer important."

Myself, I don't see much appeal in a spacegoing M&M or a used toothbrush, but they're about as good as one can hope to get right now if one collects that sort of thing. However, the most fertile territory for the dealers in space artifacts is still untapped, and we had better start tapping it soon. I'm talking about space itself, a well-stocked repository for highly marketable space debris of all sorts.

There's so much of it out there now that it'll soon be a threat to further space exploration. NASA keeps a list of detectable space objects in our vicinity that are more than four inches wide: at the moment upward of three thousand spacecraft are in orbit around Earth, two thirds of them no longer active. There are seven thousand items of miscellaneous man-made debris of lesser size but large enough to be tracked, everything from spent rocket stages to stray hand tools and a camera. And in January 2007, China tested its new anti-satellite rocket by using it to blow up an old weather satellite up yonder, thus creating, in one fell swoop, close to a thousand new orbiting fragments 530 miles above us, which by now have spread out over a belt stretching from a hundred miles up to more than two thousand. Low-altitude debris drifts toward us and eventually burns up in the atmosphere. The loftier chunks don't. They'll remain in orbit for hundreds or perhaps even thousands of years.

Our cosmic junkyard isn't just

an esthetic disgrace. Littering one's own backyard is at best a tacky thing to do, and space is our planetary backyard. (Remember Bradbury's *Martian Chronicles*, and all those empty bottles and tin cans that our guys scattered around the landscape?) Space is a big place, and even ten or eleven thousand pieces of orbiting junk in our vicinity take up a very small segment of the available territory. But the quantity keeps growing, not only because the various spacegoing nations of the world keep sending more of it aloft, but because what's already there is constantly being subdivided into lesser junk, either by design (the Chinese rocket shot) or by accident (the fuel tank of an old American rocket engine exploded a few years ago, smashing it into 713 detectable chunks.)

As the clutter population keeps growing, there's a real risk of collision between one hunk of debris and another, causing a troublesome multiplier effect. With more and more space garbage accumulating around us, creating something like Saturn's belt of rings but not as pretty, the spaceships we send up there (including the manned ones that someday will be zipping through the Solar System the way we thought they would in our stories) are going to need a lot of shielding, and some clever navigational techniques, in order to avoid getting bashed. And if the present rate of debris creation isn't abated, it will eventually become impossible to send anything into space at all. We will have sealed ourselves in with our own garbage.

What to do? NASA people have begun talking about "environmental remediation"—removing some of this stuff from our vicinity, per-

haps by using ground-based lasers to destroy it, or sending drone rockets up to collect the bigger items and nudge them into the atmosphere to be destroyed. But, says a NASA paper on the subject, "For the near term, no single remediation technique appears to be both technically feasible and economically viable."

Perhaps the free-enterprise system will provide a solution: privately financed space expeditions whose purpose is simply to gather up spacegoing junk and bring it

back to Earth for sale to collectors—a kind of profit-based cosmic salvage operation akin to the currently lucrative business of bringing up sunken ships laden with lost treasure from our oceans. It's hard to argue that a program of sending missions into space to recapture this junk for resale on Earth could be anything but virtuous. And it might just jump-start space exploration, finally putting an end to the current long hiatus. I know that Robert A. Heinlein would be pleased by that. ○

## SNOW ANGELS

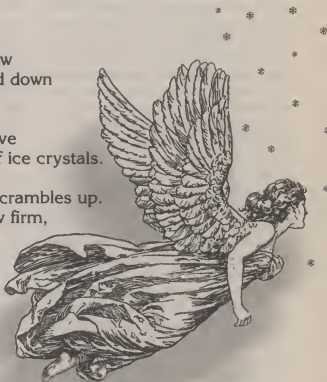
When you flop into new snow  
And wave your arms up and down  
And your legs out and in  
The snow angel  
Waits patiently until you leave  
Then takes a deep breath of ice crystals.

The angel cracks free and scrambles up.  
The wings shiver once, grow firm,  
And beat the air.

Turn on the lights at home.  
Put on a warm bathrobe.  
Make a cup of cocoa.

The snow angels rise  
Toward stars  
That shine like bits of ice  
On the dark sky.

—Ruth Berman



## MUNDANE

*this world*

Those of us who follow the fantastic genres have been on the lookout for the next literary movement ever since the cyberpunks traded in their mirrorshades for bifocals. Several candidates have presented themselves over the years. **Slipstream** <[scifi.com/sfw/interviews/sfw12963.html](http://scifi.com/sfw/interviews/sfw12963.html)>, for example. Or **The New Weird** <[en.wikipedia.org/wiki/New\\_Weird](http://en.wikipedia.org/wiki/New_Weird)>. But are these movements in the strict sense of the word, or are they creatures of intense critical discourse, or perhaps of savvy marketers? What are we to make of the fact that some writers identified as exemplars of these movements deny that they share the same agenda as their alleged comrades?

It takes two things to launch a movement, it says here: charismatic leadership and an aesthetic that offers an alternative to the literary status quo. No, no, wait a minute, make that *three* things: a movement also needs a catchy name. And it may well be that its name has kept **MundaneSF** <[en.wikipedia.org/wiki/Mundane\\_science\\_fiction](http://en.wikipedia.org/wiki/Mundane_science_fiction)> from enlisting more readers and writers. I'm certainly no expert at naming movements, but *mundane* does not seem to be the most auspicious label to give a group of ambitious writers who have joined in common cause. My dictionary defines mun-

dane as "1. ordinary, commonplace, not unusual, and often boring. 2. of this world, relating to matters of this world." Clearly it is the second meaning that pertains, but the movement marches onto the scene with that first meaning in tow.

And while MundaneSF has challenged the scientific rigor and intellectual honesty of the genre, it has also been criticized as misunderstanding the nature of modern science fiction and rejecting many of its marvelous pleasures.

So what is the alternative that this movement offers? And who are its charismatic leaders?

*privileging the likely*

Once upon a time there was an actual Mundane Manifesto on the web. It has long since disappeared, but you can always Google it to see if it has popped back up again. However, it's entirely possible that it never will. Its author, **Geoff Ryman** <[en.wikipedia.org/wiki/Geoff\\_Ryman](http://en.wikipedia.org/wiki/Geoff_Ryman)>, has written, "The first Mundane Manifesto had a mocking tone (self-mockery as well) and that seems to have got up some people's noses. I came up with the idea of calling it Mundane and the basic concept of privileging the likely over the unlikely, but it's gone through many revisions since as smarter people than me have

# Saving Money is no mystery!

Get **4** back  
Issues for  
Just \$5.95!

*That's 65% off  
the regular price!*

Expand your imagination  
with 4 favorite issues of

*Ellery Queen's Mystery  
Magazine at a fraction  
of their original price!*

To get your value pack, fill out  
the coupon below and mail it to  
us with your payment today.

**DELL MAGAZINES**

Suite SM-100, 6 Prowitt Street, Norwalk, CT 06855-1220

☒ **YES!** Please send me  
my Ellery Queen's Mystery  
Magazine Value Pack. I get 4  
back issues for just \$5.95 plus \$2  
shipping and handling (\$7.95 per  
pack, U.S. funds). My payment of  
\$\_\_\_\_\_ is enclosed. (EQPK04)

Name: \_\_\_\_\_  
(Please print)

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Please make checks payable to Dell Magazines Direct. Allow 8 weeks for delivery. Magazines are  
back issues shipped together in one package. To keep prices low we cannot make custom orders.  
Offer expires 6/30/08.

17C-NHQLV3



gone through what the movement might mean or do. We need a new manifesto urgently."

While we're waiting for someone to issue the Mundane Manifesto 2.0, we'll have to make do with the **Mundane-SF blog** <[mundane-sf.blogspot.com](http://mundane-sf.blogspot.com)>. Several writers contribute to it, some of whom prefer to remain anonymous, some of whom would appear to have been present at the birth of MundaneSF at the **Clarion Writers Workshop** <[clarion.ucsd.edu](http://clarion.ucsd.edu)> in 2002. Like any blog, it presents as a miscellany of comment and linkage, along with occasional forays into mundanespotting on bookshelves and magazines' tables of contents and announcements of markets that are kindly disposed toward the movement. However, here is a blog worth checking regularly to get the latest from the MundaneSF brain trust. The proprietors warn the casual surfer: "We will transform the way you think about SF," and more often than not, they do.

For example, it was while perusing the Mundane-SF blog that I got sidetracked by a link for **Long Bets** <[longbets.org](http://longbets.org)>, a website that features "a public arena for enjoyably competitive predictions, of interest to society, with philanthropic money at stake." While not exactly science fictional, it presents a unique forum for the kind of futurist speculations central to MundaneSF. An expert makes a prediction about some issue important to society. If someone disagrees, they make a bet against the prediction. On the bet page, the bettors submit their arguments—and back them up with a sum of money to go to the designated charity of the winner. For example, of particular interest to the Mundanes and science fiction fans

in general is Bet 1: "By 2029 no computer—or 'machine intelligence'—will have passed the Turing Test." Agreeing is **Mitch Kapor** <[kapor.com](http://kapor.com)>; **Ray Kurzweil** <[kurzweilai.net](http://kurzweilai.net)> disagrees. The stakes: twenty thousand dollars. Book lovers will want to consider the back and forth on Bet 6: "By 2010, more than 50 percent of books sold worldwide will be printed on demand at the point of sale in the form of library-quality paperbacks." Two thousand dollars is at stake as **Jason Epstein** <[jason.epstein.cgpublisher.com](http://jason.epstein.cgpublisher.com)> and **Vint Cerf** <[ibiblio.org/pioneers/cerf.html](http://ibiblio.org/pioneers/cerf.html)> square off. This is a fascinating site!

Meanwhile, back to the movement. The first I ever heard of MundaneSF was in 2004. I had been asked to teach **Clarion West** <[clarionwest.org](http://clarionwest.org)> in Seattle with my friend **John Kessel** <[www4.ncsu.edu/~tenshi/index2.html](http://www4.ncsu.edu/~tenshi/index2.html)>, and our week at the workshop immediately followed Geoff's. John and Geoff and I went out to dinner on the changeover day with the Clarion West administrator, Leslie Howle, to catch up on happenings around the critique table. Geoff had been talking with the students about mundane science fiction during his week and shared a précis of the discussion with us. I admit that I was perplexed at first by his thinking: how was MundaneSF all that different from what had up until then been called hard science fiction?

Of all of those associated with MundaneSF, Geoff is by far the best known—and the most charismatic. He has spoken and written eloquently about the movement's goals in any number of online venues: **Infinity Plus** <[infinityplus](http://infinityplus)>.

co.uk/nonfiction/intgr.htm>, **Locus** <locusmag.com/2006/Issues/01Ryman.html>, and the **Chronicles Network** <chronicles-network.com/forum/11294-geoff-ryman-interview-in-four-parts.html>. Here's some of what he has had to say:

"We felt as if SF had accumulated so many improbable ideas and relied on them so regularly, that it had disconnected from reality. The futures it was portraying were so unlikely as to be irrelevant, if not actually harmful. Julian Todd, a British SF writer, pointed out the moral problems as well. If we keep telling ourselves that faster-than-light travel will whisk us to scores of new Earths, then we'd feel better about burning through this one." Speech at BOREAL 2007 SF convention.

And there's the argument that gradually won me over: "apart from anything else, if you're writing science fiction you want to be privileging the more likely over the least likely, especially if the least likely happens to coincide with all your hopes, dreams, and desires. If it's more likely and you're not looking at it because it seems less attractive, that's probably where you should go. That's where you'll find the new material, the difficult material." *Locus* 2006

I may be naïve, but it seems to me that any rational consumer of science fiction must acknowledge that Geoff is scoring points here. (Note: although I ultimately accept Geoff's interpretation of the subtext of

FTL, that we can burn through this planet on our way to colonizing New Asimov and Heinlein Five, I do have to stretch to get to acceptance.) Faithful readers of this column will recall that I wrote of the near insurmountable difficulties in creating **starships** <archive.org/details/Free\_Reads\_21\_On\_The\_Net\_FTL> or **time machines** <asimovs.com/issue\_0407/onthe\_net2.shtml>. So how can the new—or old—space opera be "science" fiction? How much of science fiction's cherished canon is . . . well . . . *fantasy*?

#### notes

This question has sparked a fierce debate. When the advocates of MundaneSF call science fiction to account, they assert that many of our most cherished tropes must be reassigned to our less realistic sister genre. Which tropes? Well, consider that the movement has captured one of SF's most prestigious showcases, the British magazine **Interzone** <ttafpress.com/category/interzone> for a special **MundaneSF** issue <freesteel.co.uk/cgi-bin/mundane.py> and has issued a checklist of prohibited topics. Know that the table of contents will not contain FTL, psi, nanobots, aliens, computer consciousness, profitable space travel, immortality, mind uploading, teleportation, or time travel.

Here are the guest editors set-

**READERS:** If you are having problems finding *Asimov's Science Fiction* at your favorite retailer, we want to help. First let the store manager know that you want the store to carry *Asimov's*. Then send us a letter or postcard telling us the full name and address of the store (with street name and number, if possible). Write to us at: *Asimov's Science Fiction*, Dept. NS, 6 Prowitt St., Norwalk, CT 06855-1220. Thank you!

ting out their agenda in no uncertain terms: "For one issue only, we are going to set aside all the noise and electric guitars and anything-goes-as-usual mentality associated with contemporary Science Fiction, and do it properly."

*Hmm.*

As you sift through the smoking ruins of your library, it may be time to reconsider the definition of SF

*properly*

What the MundaneSF movement is asking in their polemical way is important: what is proper to science fiction? Are we to be futurists <[wfs.org](http://wfs.org)> who wrap our predictions in plot, character, and setting? How much may we deviate from what scientists and technologists tell us is possible, and what is the price we pay for straying too far into the precincts of pure imagination?

The criticism of MundaneSF has two chief threads: it is unnecessary and it is wrong-headed. A **blog rant** <[ianmcdonald.livejournal.com/2378.html](http://ianmcdonald.livejournal.com/2378.html)> of the brilliant **Ian McDonald** <[en.wikipedia.org/wiki/Ian\\_McDonald\\_\(author\)](http://en.wikipedia.org/wiki/Ian_McDonald_(author))> covers the ground nicely. "But I wrote all this (MundaneSF-eligible masterwork like **The River of Gods** <[trashotron.com/agony/columns/2004/08-23-04.htm](http://trashotron.com/agony/columns/2004/08-23-04.htm)>) without knowing of the Mundane Manifesto, let alone that such a movement existed, and certainly without having read a single word of the dogme. If I had, it would have been much worse a book for it. For at one level you can call such a dogme creative constraint. At another it's box ticking. Ignorance, in my case, was bliss. And I wish I was ignorant again, because I don't

want those boxes there, to either have to tick or ignore." Later he writes, "It's a poor manifesto that would venerate Verne (tech-speculation) but consigns much of H.G. Wells' core texts to the 'bonfire of stupidities' (interplanetary war, aliens, time-travel . . .). To me, one of the strengths of SF is that it is an allegorical literature: parables and myths of our age."

*exit*

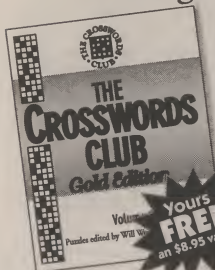
The question of exactly who are the MundaneSF writers is a vexing one. Those who identify themselves as such have been circumspect when naming the names of others who may not share their ideological zeal—or even be aware that a mundane ideology has been promulgated. Instead they point to texts that pass their tests without necessarily dragooning the writers into their movement. Indeed, even Geoff Ryman has committed literary sins against the movement's agenda.

Like Ian McDonald—indeed, like most science fiction writers—I have written some stories that fit the MundaneSF prescription and some that do not. I find myself in sympathy with their arguments when I recall my intentions as I wrote those particular stories that pass their test. It is difficult to write about futures that could actually come to pass, and not only are most of the tropes they decry unlikely, but some are in dire need of an aesthetic makeover. And yet, since so many of my best known—and favorite—stories are clearly not Mundane, I can't in conscience declare myself for the movement.

But I am listening to what they say. ○

# FREE BONUS BOOK

With every elite Crosswords Club gift membership!



Use the coupon below to give a gift membership to **The Crosswords Club** or **The Uptown Puzzle Club** and you'll receive *The Crosswords Club Gold Edition* book **FREE!**

A great gift for yourself...or to give along with your gift subscription!

*64 pages packed with some of our most entertaining puzzles ever!*

**Choose your Crosswords Club Gift:**

\***The Crosswords Club** - Six original high-quality themed crosswords per month.

\***The Uptown Puzzle Club** - Five completely new crosswords per month from the best puzzle constructors in the country.

**Order TOLL-FREE: 1-800-433-4386 (8am-7pm, EST)**

Mail to: **The Crosswords Club** • Dept. S, 6 Prowitt St. • Norwalk, CT 06855-1220

☐ **YES!** Enter a 1-year gift membership as indicated below and send me *The Crosswords Club Gold Edition Vol. 1* (XWGFR) for **FREE!**

☐ *The Crosswords Club* (XWC)  
1 year/\$39.95

☐ *The Uptown Puzzle Club* (UTC)  
1 year/\$35.00

Send to \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ ZIP \_\_\_\_\_

Your name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ ZIP \_\_\_\_\_

Allow up to 4 weeks for delivery of first issue.

**Outside the USA:** Canada and Mexico add \$10 per membership per year. All other foreign countries add \$25 per membership per year.

Offer expires December 31, 2008. **97C-NZ3CLL**

Borgo Press recently released two collections of Brian Stableford's tales of the Biotech revolution, *The Cure for Love* and *The Tree of Life*, both of whose title stories appeared in *Asimov's*. He will shortly launch an ambitious program of translations of classic French scientific romances from Black Coat Press, beginning with Gustave Le Rouge's *Vampires of Mars* and Théo Varlet and Octave Joncquel's *A Martian Epic*. Some unexpected consequences of biotech are unsparingly revealed when the author sends us on a journey . . .

# FOLLOWING THE PHARMERS

Brian Stableford

*"When tillage begins, other arts follow. The farmers, therefore, are the founders of human civilization."*

—Daniel Webster

**I**t was early in June that the antheric alates began appearing on my verandah. At first I assumed that they were natural insects—some new species of miniature butterfly nurtured in the evolutionary hothouse that Holderness had recently become. Their tiny wings were brightly colored, with a quasi-metallic sheen that enabled them to flare like sparks in the bright light of noon and twinkle like stars in the evening, when the sun sank into the bosom of the Wolds. Initially, I welcomed their arrival as a fortunate discovery, a safe distraction from the burdensome aspects of my isolation.

Once I had examined a couple of the motiles with a magnifying glass I realized that they weren't insects, but I was still possessed by the idea that they might be some new kind of invertebrate animal—perhaps an entirely new branch of the arthropoda, spun off by bold mutation from one of the many former sea-creatures that were adapting with astonish-

ing rapidity to the Yorkshire Everglades. Once I had put one under the microscope, though, I realized that they were vegetal, and also that they were artificial.

That was when I started cursing. It meant that I had a new neighbor. The whole point of our moving to Hollyn—a place that wasn't even supposed to exist any more, in the official cartography of New England—had been to give us the opportunity to do our work in peace. I hadn't wanted neighbors when Marie was still around; I certainly didn't want one now that she was gone, unable to return.

I wasn't completely isolated from human contact, of course, but I didn't count the Patrington communards as "neighbors." They performed a useful intermediary function in transmitting my produce to the wholesalers in Hull—a necessary function, given the amount of chemical assistance I'd have needed to go all the way to the city on my own behalf. In any case, Patrington, which had also benefited from an unexpected and so-far-unrecorded re-emergence from the shallows of the Holderness to become a substantial new island, was a good seven kilometers away. The alates, I judged, must have come from somewhere considerably closer.

The communards were small pharmerers like me; they planted, nurtured, and processed their crops according to strict chemical rituals, never taking the risk of producing anything new. Whoever was producing plants with alate pollen-sacs, on the other hand, had to be an artist, an innovator of considerable daring as well as abundant talent. From the viewpoint of a small pharmer, artists qualified as loose cannons: mad, bad, and dangerous to have around. I knew, because I'd fancied myself as one in the days of my *folie à deux* with Marie, and even before that, in the days when we had both been wage-slaves in one of the corporate giants making up Big Pharma.

My verandah faced north, to give me shade from the hostile UV of the noonday sun, and that was the direction from which the alates were coming. There shouldn't have been anywhere in that direction for them to come from, but I knew that if the stubborn ancient walls of Hollyn and Patrington could provide the foundations for marvelous growths of littoral limestone, and hence for newborn islands where plastishacks could be securely bedded, there was every possibility that parts of Withernsea could do likewise.

Of all the former dwelling-places in the Holderness, Withernsea was the one that generated the most legendary echoes—far more than Hornsea, which had been a considerably bigger town in the Ice Age. As its name proudly declared, Withernsea had been on the coast in those days, and would now be unsheltered on its eastern shore from the full wrath of the North Sea storms—but what it lacked in safety it might make up in romance, at least in the eyes of an artist.

Withernsea was a lot closer to Hollyn than Patrington, as any sort of creature might fly, but I had no idea whether there was a navigable channel through the algal dendrites that reared up from the new sea bed, whose colonization of the Holderness grew more insistent with every year that passed. I never went out in the motorboat for "leisure purposes," but if I ever had I'd have headed vaguely westward, in the direction that



would have qualified as "inland" before the old Ice Age land had been gradually swallowed up by the salt-marsh.

I considered the possibility of ignoring the matter, simply hoping that it wouldn't become a problem. If I had been a fungal specialist, like the communards of Patrington, that would have been a justifiable strategy, but I wasn't. I had three species of flowering plants producing reliable cash crops. The rape and the poppies were safe enough for the time being, but there was no way of knowing how far across the angiospermal spectrum the artist's experiments might eventually range, and the foxgloves might already be in hazard. Pharmed foxgloves are notoriously vulnerable to what the technical jargon terms "bizarre pollination," in spite of the insect-repellents built into their nectar. I didn't suppose for a moment that those inbuilt insect repellents would have the slightest effect on antheric alates.

For that reason, I really needed to talk to my new neighbor about the situation, if I could. With luck, all I'd have to do would be to ask politely that he tighten up his security measures, and he'd be willing to oblige. There is, after all, a certain core of politeness involved in living outside the law; no one with any sense wants to give anyone else too powerful a reason to stir up trouble. I'd have to get my head in condition to make the trip, but I trusted my own products and visiting wasn't something I'd ever had to do with sufficient frequency to risk another hook.

I didn't know how long it would take me to find a viable route to Withernsea, but I didn't dare set off in the early morning, even with a canopy over the boat and the shade of the algal dendrites to limit my UV exposure. Given that it was June, when the days lasted far longer than the nights, the prudent thing to do was to pop the requisite pills in late afternoon and set off in the right direction, establishing a deadline for the search that would guarantee me a safe passage home before the twilight dwindled away.

I didn't make it on the first day, but I figured out a mazy route that got me close enough to the re-risen Withernsea not merely to estimate the contours of the island but actually to glimpse the roof of the largest of the plastishacks in which the artist had set up production. It was hard to miss, not only because of its capacious size and flamboyant architectural design, but because of its blatant disregard for the most elementary camouflage. If a copter were ever to fly over my place, its pilot would need a keen and attentive eye to make it out, but the new building stuck out from its surroundings like a tarantula on a lacy net curtain. The Hull police had far more urgent things to do at present than explore the Holderness, which lay outside their jurisdiction, but the boldness of the new development was still reckless.

The next day, I followed the mazy path I'd already mapped out with all possible speed, starting at four-thirty, and had found a way to the shore of the new island by six. I tied the boat up in the shade of a mock-willow, and made my way stealthily over the virgin coraloids to the sturdy platform on which the complex of plastishacks had been erected. The central element, at least, was more mansion than shack.

Ever since the Great Migration had begun, technologies for erecting in-



stant houses had been subject to tremendous selective pressure, forcing them to evolve with the same tachytelic fervor as the new littoral ecosystems that were recolonizing the drowned land. Even so, the house seemed to institute a significant step forward. I'd never seen anything like it advertised on TV. The artist was obviously an exceedingly rich amateur rather than the kind of impoverished optimist who used to starve in the proverbial garrets of the Ice Age.

My heart sank as I looked at the place from a distance, sheltered by the algal undergrowth, and I nearly lost my nerve. In spite of the chemical fortification, I wanted to change my mind, turn around and go back home. I knew, though, that if I did that I'd eventually have to come back, probably sooner rather than later. The combination of necessity and curiosity was just powerful enough to give me the courage to continue going forward and knock on the door. My approach was tentative, as much for fear of guard dogs or an entourage of bodyguards as my native inclinations, but the place was utterly quiet. If there was anyone at home, they were busy about their daily toil.

I knocked, and waited.

The person who answered the door was a casually dressed female, whose apparent age was about twenty-one. I didn't immediately jump to the conclusion that she was a lowly servant, though. The kind of wealth necessary to buy a mansion-sized plastishack could also buy a great deal of cosmetic somatic engineering, and I assumed that even rich people dressed casually when they weren't expecting visitors. The woman might easily be the kind of apparent twenty-one-year-old who'd been around for more than a century. Those kinds of people, so rumor had it, often went in for exotic hobbies.

"I'm Daniel Anderson," I told her, while she looked me coolly up and down. "I'm probably your nearest neighbor, unless there's someone closer to the north."

"I'm not supposed to have any neighbors," the woman replied, her use of the personal pronoun suggesting that she was the artist herself rather than any mere hireling. "That was the whole point of moving out here. There isn't supposed to be anyone living between here and Hull. There isn't even supposed to be anywhere for them to live." The way she stood in the doorway was manifestly imperious; she was definitely the mistress of the house.

"This place isn't supposed to exist either," I pointed out. "My smallholding is on new ground that formed above the walls of the church at an Ice Age village called Hollyn—the steeple came down and the roof caved in, but the rest stood firm. I run a small pharm there."

"How nice," she said. She still hadn't told me her name, let alone invited me in. "What do you grow there?"

"Psychotropics. Mostly amanita and muscaria derivatives, some opiates, a few exotic oils, and digitalids."

"Digitalids?" she queried. "Does that include inspirationals and focal intensifiers?" She was definitely an artist.

"Yes it does," I said. "Nothing very exotic, though—standard stuff you

could buy off the shelf if the law were a little saner and Big Pharma a little less paranoid."

"Ah," she said. "You've found some of my alates, haven't you? You're worried about the possibility of transgressive cross-pollination. How far away is your pharm, exactly?"

"A little less than three kilometers, as the alate flies," I told her.

"That far? I had no idea that my little treasures had that sort of range, even with the aid of a favorable wind. The wind mostly blows from the west, carrying escapees out to sea, but the land and sea breezes are brisker in summer, and they alternate with a certain forceful regularity. I can assure you that my alates pose no danger to your poppies and foxgloves. For the moment, I'm only working with roses, lilies, and orchids, and I've no intention of broadening my experimental range in the present phase of my campaign."

"How long is the present phase of your campaign likely to last?" I asked, lending a slight ironic emphasis to the odd phraseology.

She didn't answer. She didn't shut the door in my face, though. She was obviously intrigued to discover that she had a neighbor within a mere three kilometers. She wanted to know more about me. She knew full well that it would be easier and safer to do that at a distance, but she was apparently the kind of person who preferred operating directly, face-to-face—unlike me.

"What do you think of my designs, Mr. Anderson?" she asked.

I didn't suppose that she cared about my critical opinion. She was fishing for information about my politics, and the extent of my biochemical expertise. "It's not a matter of aesthetic admiration, so far as I'm concerned," I told her. "I'm sure that the natural flowering plants that are busy colonizing the New Everglades are too discriminating to entertain foreign pollen, but the whole point of engineered flowers is to welcome hybridization and facilitate eclectic recombinations. It's hard enough keeping my poppies and foxgloves from unnatural intercourse with one another, without having dozens of varieties of ambitious pollen flying in of their own volition. Would it be possible for you to tighten up your containment procedures? Not so much for my benefit as for your own—it's only a matter of time before other people begin finding your stray produce."

"I can assure you," she said, "that the police aren't going to bother me here." She sounded very confident. She looked me up and down again, as if measuring me for aggressive potential. I had to admit that, from her point of view, I might easily seem dangerous, no matter what kind of subtle defenses her fancy house was fitted with or how many other people would come running in response to a cry of alarm. After a suitable pause, though, she nodded and moved aside, inviting me to come in.

I hesitated. I wanted to turn and run, assuring myself as I went that I'd done what I came to do, and that there was no need to string it out.

She frowned, obviously having divined the impulse, and finding it rather unflattering. "I'm Judith Hillinger," she said, as if that were guaranteed to settle the matter.

It took a couple of seconds for the reflex to kick in and bring the memo-

ry to the surface. The moment of realization must have been clearly legible on my face. "Please come in," she said, to complete her victory. "Given that we're neighbors, we ought to get to know one another a little better."

She showed me into a room that the mansion's architect must have envisaged as a "reception room," even though the edifice was located in a place to which invited guests and stray callers would have to make a long and awkward journey. I sat down on a settee, which was upholstered in fancy leather that had never been worn by a cow, and accepted her offer of a glass of iced water.

"You have the advantage of me now," she said. "You probably know my entire life story, up to the point when I was released from jail. Even if you somehow contrived to miss the scandal, you can extract every detail from web archives in a matter of minutes. I know nothing at all about you, though, and if I were to feed your name into a search engine I'd probably find it very difficult to sort out one particular Daniel Anderson from all the rest."

I knew how slight and short-lived any advantage I might possess would prove. If she wanted to find out everything there was to know about me, she could do it—except, of course, for the one thing that nobody knew. I didn't even have the momentary advantage of still being familiar with the lurid details of her case. All I remembered for sure was that she was sufficiently well-connected to have got away with a slap on the wrist for the kinds of flagrantly illegal but essentially unhazardous plant engineering she'd been doing a decade or so ago, and that she had inherited so much money from her late father that the maximum fine would hardly have made a dent in her fortune. Instead, she'd elected to go to trial, and had turned the courtroom into a media circus, making impassioned speeches in defense of the freedom of creativity, and the urgent necessity of humankind becoming the true masters of evolution.

I'd thought that what she'd done was foolish and counterproductive even at the time, when I too had still been enthusiastic to invent, innovate, and become a master of mental evolution. She'd posed as a hero, but she was really just a nuisance, making it harder rather than easier for those who worked patiently in the shadows.

"There's nothing about me to interest someone like you," I told her, not knowing whether to hope that it was true. "I'm just a pharmer, trying to make a dishonest living in peace."

"Which implies, I presume, that you haven't got a criminal record—yet."

"No. Are you going to turn me in? I suppose that a simple phone call from you would be enough to bring police copters scurrying from Hull to Hollyn, no matter how much they have on their plate."

"Don't be ridiculous," she said. "I'm in hiding, just as you are—and for me, as you'll understand, that's a little more difficult. The police won't bother me, as I said, but that doesn't mean that you couldn't cause trouble for me. If you were to tip off a certain section of the media. . . ."

"I wouldn't," I said. "As you say, it's as much in my interest as yours to be discreet—which is why I'm here, to warn you about the alate problem. I just want us to be good neighbors. As far as I'm concerned, you have as

much right to be here as I have, and to do exactly as you please—but I need to protect my investment. My margins are a trifle thin right now; the market's oversupplied, and the dealers I work with have troubles of their own."

"Perhaps you ought to be developing new products," she said.

"I've tried that," I admitted, trying to keep the bitterness out of my voice. "Research in psychotropics is difficult and dangerous; testing new products is the sort of thing that can seriously damage your thought-processes. Adventures of your sort carry far less hazard, and the results are much easier to evaluate. I presume that you don't have to worry overmuch about regulating your turnover and protecting your profit margins."

"You're right, I suppose," she said insouciantly. "Given your apparently straitened circumstances, I dare say that it would be difficult for you to relocate—and why should you, given that you were here first? You're right; the best thing is for us to make the effort to be good neighbors. If my alates' range extends to several kilometers, I'll have to make more effort to contain them. It'll be a nuisance, but it's not impractical. I originally intended to surround the compound with high fences—nothing obtrusive, just spidersilk mesh sustained by discreet poles—but I let it slide when I discovered how difficult it is to make them stormproof. I'll just have to steel myself to the necessity of frequent repairs. Maybe I can get away with shielding the southern and western sides, so that any fliers that go a-wandering will be lost at sea. Will you give me a little grace, so that I can experiment with potential solutions until we find one that suits us both?"

"That's fine," I assured her—and it was, indeed, a better deal than I had any right to hope for, given that she probably had enough money to force me out or crush me like a bug, if that had been the way her instinct worked. "Thanks—I appreciate it. If there's anything I can offer by way of trade. . . ."

"Of course there is," she said. "It will be handy, now I come to think about it, to have a local supplier. I'll pay you the retail price, and I'll trust you not to poison me."

The last comment was probably more of a threat than an expression of confidence, but she said it so lightly that I didn't take offense.

"Are you living here alone?" I asked.

"Oh no," she said. "I don't pay anyone to answer the door, because I didn't expect to have any uninvited visitors, but I'm not alone. I have three technical assistants, a cook-housekeeper, and a boatman. The cook and the boatman are out fishing at present. Do you live alone, Mr. Anderson?"

"Yes," I said, shortly.

"That must be rather lonely," she said. "Perhaps you might come to dinner some time—but I'd really rather that you didn't drop in uninvited, if you don't mind. I'll give you a number to call, and you must give me yours. Would you like to see my laboratory?"

The last sentence came as a complete surprise, given that its immediate predecessors had implied that I was being brushed off now that our business was settled. She was an artist, though, and I was a pharmer

who'd confessed to having done original work in the past. She had some reason to expect that I'd be capable of understanding her labwork and appreciating its results. I also figured that she probably wanted to satisfy my curiosity, so I wouldn't have quite so much incentive to come back again.

"Yes," I said. "I would."

The lab was impressive, as it had every right to be, given the money that had obviously been lavished on it. Judith Hillinger's three technical assistants were equally impressive, at least to look at. Not one of them appeared to be a day over twenty-one, although I guessed that they'd all had help in that regard. All three were female, though, so their expensive looks were presumably going to waste, unless the absent cook-housekeeper and boatman were both male and similarly cosmetically enhanced. I felt very old and very ugly, and I wasn't at all reassured by the politely disdainful way the three women looked at me as they were introduced, one by one.

I made suitably complimentary murmurs in confrontation with the genomic analysis kits, the chromosomal maps and the batteries of restriction enzymes, although the only thing that really impressed me was the sophistication of the proteonomic analyses. I made a similar show of being impressed by the seed nurseries and the hydroponics. I didn't have to make any effort at all, though, when we finally went into the greenhouses, whose contents simply took my breath away.

As Judith Hillinger had told me, she was working with roses, lilies, and orchids—all long-time favorites of floral engineers. The blooms themselves didn't look particularly beautiful and unusual, by the standards that had been established half a century ago, and the symphony of their nectar was also expectable—but it wasn't the shape, color and scent of the blooms that stunned me with amazement.

I'd already seen the alates, of course, perched in twos and threes on the rail of my verandah, or fluttering in mid-air in tiny flocks of six or seven—but those were escapees a long way from home. In the greenhouses, the air was filled with them, not merely in their thousands but in their hundreds of thousands. It was their riotous colors, and the play of light on their wings, that struck me with extreme aesthetic force.

As Judith Hillinger moved among them, the alates settled on her body in their hundreds, and she adjusted her movements so as not to risk crushing them. I did likewise, and as we passed through the greenhouses we both seemed to be moving in slow motion, having undergone a metamorphosis into something far richer and stranger than anything merely human.

She had to put a hand over her mouth to shield it from invasion in order to speak, but she had a speech to make and she wasn't about to be inhibited.

"This is the way it should have been, Mr. Anderson," she said. "This is the path that evolution should have taken. This is one of the reasons why we must become masters of evolution as swiftly as possible—to correct the errors of natural selection. We'll have to start with the harmless ones,

of course, in order to establish the principle—but pretty little ventures of this kind will only be the beginning.”

This prompt allowed me to remember a little bit more about the content of the ostentatious speeches that Judith Hillinger had made in court when she’d tried to make herself a martyr for the creationist cause. She’d compared the work of natural selection to that of early computer programmers, who had been far more interested in finding a way to get the job done than in writing elegant code. As computing power and computer networks had grown at an explosive rate, all kinds of hasty improvisations had been built into source-codes, their weaknesses compensated by an ever-increasing mess of ungainly patches—which kept the whole thing working, after a fashion, but whose sheer mass and complexity prevented anyone from ever going back to basics and redesigning the code more efficiently and elegantly. By the same token, she’d argued, the ecosphere had blithely preserved anything that worked, however inelegantly, and built up whole ecosystems by adding patches as they were thrown up by mutation—resulting in a vast ungainly complex that no one with any aesthetic intelligence would ever have designed, but which couldn’t be comprehensively overhauled.

“When flowering plants first evolved,” I said, to demonstrate to her that I was no fool, in spite of my exceedingly plain appearance, “the gymnosperms they were replacing set a very low standard of competition, in terms of their methods of pollination. The new forms didn’t need to be very clever—just clever enough. It happened to be the evolutionary era in which the insects were undergoing *their* first major adaptive radiation, and insect pollination was good enough to do the trick. It would have been so much more elegant—albeit considerably more energy-expensive—for the angiosperms to invent pollen that could fly rather than rely on insects to serve as vectors, but the quick fix took hold. Once it had taken hold, the angiosperms and the insects became the major selective forces shaping one another’s consequent evolution, so the whole ecosystem grew more and more elaborate, accumulating all manner of improvisatory patches—and the mutual success story was so spectacular that the prospect of going back to square one and finding a more elegant solution to the pollination problem vanished into the mists of possibility. Until now. You’re not just trying to make prettier flowers for the home and garden, are you, Ms. Hillinger? You’re trying to lay the groundwork for a whole new phase of plant evolution. So why start with roses, lilies, and orchids?”

“I may be rich, Mr. Anderson,” she said, “but I’m not *super*-rich. I need marketable products and healthy profits to finance further investment. This is just the beginning, as I said—and I’m not just talking about building a commercial empire.”

“You’re even more determined to get the law changed now than you were before you went to jail,” I said, glad to be able to demonstrate that I was keeping up with her. “This is phase two of the great crusade, whose furtherance will be *seriously* expensive. It’s not just a matter of buying more kit, hiring more techs, and passing a few more brown envelopes to the Hull Police. Changing the law requires a war for hearts and minds,



involving powerful advertising campaigns and relentless lobbying. Well, I wish you luck, Ms. Hillinger, I really do."

"Thank you, Mr. Anderson. I might be able to use a man like you, you know—and I could certainly use your pharm as a second experimental base. I think we could put together a very attractive package for you, which would put an end to your financial difficulties for some time to come, if you didn't want to stay on in a managerial capacity."

"I'm sorry, Ms. Hillinger, but that's out of the question," I said. "If I wanted to work for someone else, I'd never have quit Big Pharma."

"I'm not Big Pharma," Judith Hillinger stated, as if I'd just delivered a mortal insult. "I'm the absolute opposite. I'm starting out small, but I intend to become one of the leaders of the Revolution."

"If I weren't a confirmed loner, I wouldn't be holed up in the remoter regions of the Holderness," I told her. "I really do wish you the best of luck—but I'm just a pharmer, not a revolutionary. I don't want to be a part of your grand plan."

"You could get your looks fixed," she said, as if that were her idea of an offer that no one could refuse.

"I'm sure I could," I said, "but I think I'd rather wait for ugly to come back into fashion. I'm grateful, but the answer's still no. Can we just be good neighbors?"

She flashed me a smile that might have been intended to remind me exactly what I was turning down. "Of course we can," she said. "I'm sure that we shall."

When I got home, I found that I'd had visitors. I say "visitors" because they didn't seem to have been burglars, exactly, and they didn't seem to have been vandals, exactly. They'd messed things up more than a little, and they'd stolen some trivia, but they hadn't smashed anything up so badly that it would be difficult to make repairs, and they hadn't taken anything that I couldn't do without. Whatever their primary motive had been, it hadn't been robbery or destruction.

It occurred to me almost immediately, of course, that there might have been another reason why Judith Hillinger had invited me to look over her laboratory and her specimen-houses rather than letting me go home once we'd made an agreement. She had kept me there for a good two and a half hours after I'd told her where I lived and exactly how far away it was. I hadn't seen her make any phone calls, but I hadn't had my eyes on her all the time that I was being introduced to her three lovely assistants and shown around the labs. If the cook-housekeeper and the boatman had been fishing in the marsh rather than the open sea, there had been plenty of time for them to locate my pharm, take a good look around, and leave me abundant evidence that they'd been there.

I knew that I had to be careful about jumping to conclusions of that sort, because the pills I'd taken to enable me to make the excursion were notorious for inducing paranoid side-effects, but a pharmer has better reason than most people to bear in mind the old adage that just because you're paranoid, doesn't mean they aren't out to get you. If it hadn't been Judith Hillinger's people, who could it have been? If the troubles the deal-



ers in Hull were currently experiencing had extended backward along the supply-chain my visitors would surely have done a great deal more damage.

Whoever they were, the invaders hadn't done anything serious—but they'd left me a clear enough message as to what they *might* have done, had they been so minded. I knew that if I picked up the phone and told Judith Hillinger what had happened she'd be full of sympathy, and would put on a big show of being deeply hurt if I suggested, however delicately, that she might have had something to do with it. There was no point in doing that. After all, even if she had been responsible, she wasn't leaning on me hard—not yet. She wasn't trying to get rid of me, or force me to sign on to her Great Crusade. It was probably just that her idea of being a good neighbor wasn't quite the same as mine. She was probably prepared to play nicely, provided that it was perfectly clear who had the upper hand in the game and the power to crush the opposition, should the need arise.

I tidied up, and got on with my work.

For the next few days the numbers of the stray alates declined steadily; after a week had elapsed it became rare to see even one in the course of a day. Judith Hillinger had obviously instructed her hired help to put up some efficient netting to the south of her house. I was duly grateful for that, and tried to put her out of my mind. I didn't call her, and I didn't expect her to call me. On the afternoon of the first of July, though, my pocketphone trilled, and when I interrogated the display I recognized the number she had given me.

"Ms. Hillinger," I said. "How nice to hear from you again. What do you need?"

"That depends on what you have for sale," she said.

"You mentioned inspirational and focal intensifiers when I visited you," I reminded her. "I have basic products in both lines, as well as the usual range of memory-enhancers, euphorics, narcotics, hallucinogens, and stimulants. I don't deliver, though—you'll have to send your boatman to collect the package."

"I'd prefer to collect them myself," she said, lightly. "It would get me out of the house for a while, and I'd be interested to look over your pharm. I showed you mine, remember."

"I remember," I assured her. "You'd be very welcome. I still need to know what you need, though, so I can make up a package."

"I'll make my selection when I've looked around," she told me. "I don't mind waiting while you assemble the package. I'll be there in an hour or so, if that's convenient."

"Do you need directions?" I asked innocently.

"I'm sure that my boatman can find you," she countered. "We have an Ice Age map."

An hour later, at five o'clock or so, her boat arrived at the crude jetty where I kept my own motorboat tied up. Unsurprisingly, her boat was a lot bigger than mine, with a much nicer canopy to keep the UV at bay—which hadn't prevented Judith Hillinger from carrying a pink parasol, or deterred the boatman from wearing shades with skintight lenses the size

of brandy-schooners. The boatman was an exceptionally handsome man with an unfashionably muscular body; he could have broken me in half with his bare hands while smiling like a model for the latest generation of smart underclothes. Judith Hillinger introduced him as Jacquard, but he stayed with the boat while I led her to my home. The shack had never seemed more deserving of its name.

I gave her the tour, all too well aware of the fact that the plastic-shelled igloos sheltering my poppies and foxgloves were the merest shadow of her magnificent greenhouses, and that my mushroom cellars were hideously rank by comparison with the nectar-laden air of her entire establishment. She was very polite, except when I showed her what had once been my research lab, where Marie and I had tweaked psychoactive compounds in search of something far more radical than the palliative treatments for Asperger's syndrome that Big Pharma had commissioned us to develop.

"You've let this part of your work languish, I see," she observed. "You shouldn't have done that, Mr. Anderson. A proteonomicist like you ought to be working at the cutting edge, not growing standard products—isn't that why you went out on your own in the first place?"

She'd obviously taken the trouble to sort me out from all the other Daniel Andersons, and had been at least a little bit intrigued by what she'd found. She must have known that I hadn't gone out of Big Pharma "on my own," but she was carefully refraining from mentioning Marie, at present.

"I went into psychotropic proteonomics because it was fashionable," I said, modestly. "I was no hotshot. Everybody working in psychotropics at the time dreamed about discovering the ultimate high, so I bought my ticket in the lottery. It turned out to be a loser. I'm just a small pharmer now—it's not glamorous, but my products are guaranteed to be clean and safe. Not everyone can say the same."

"If you didn't want to do more challenging work for me—or for yourself—because you've lost your creative spark, there are ways and means to reignite it," she told me. "If your own products aren't up to it, I can help you obtain some that are. You don't have to run to seed out here in the wilderness. You can be part of something that will eventually change the world—and when I say change the world, Mr. Anderson, I mean it."

"I know what you mean," I said. "What do you need, Ms. Hillinger? I ought to start making up your order."

That caused her to sigh, but she brought out a shopping list. The quantities of euphorics, narcotics, and orthodox stimulants were modest, but those of inspirationals and focal intensifiers weren't.

"I can't supply the anaphrodisiacs," I said. "It's not a product for which there's a lot of demand. I can't do the quantities of inspirationals and focal intensifiers immediately, but if half this amount will keep you going for a fortnight, I can top up the order then."

"That's fine," she said.

"In all conscience, I have to check," I said. "This is for the use of four people, yes? Your entire technical staff?"

"Of course," she said.

"Even so," I said, "it's a heavy load. You have to be careful alternating

drugs with contradictory effects—you can seriously screw up the feedback mechanisms that control their natural analogues.”

“Now that we have compounds that can do the job more efficiently,” she said, a trifle frostily, “we don’t need the natural analogues. Natural selection is an improviser, always content with what works *well enough*. We’re our own masters now, Mr. Anderson, in body and mind alike.”

She was speaking for herself, of course, and offering me a subtle insult in the process. Cosmetically unenhanced as I was, I looked my age and I wasn’t nearly as handsome as her boatman, but that wasn’t what she was getting at. She was accusing me of being a traitor to the cause, of letting my creative impulses decay because I wasn’t willing to take charge of them and substitute artful biochemistry for the feeble provision of nature.

“Taking the drugs yourself is one thing, Ms. Hillinger,” I said. “Feeding them to your employees is another—and don’t tell me that they’re under no pressure, because I’ve worked in Big Pharma and I know exactly how much pressure there is for employees to be competitive and keep up with the ambient flow. I’m no nature-knows-best freak, but I do know that our improvisations and patches aren’t *that* much better than those thrown up by natural selection—and reckless interference with feedback mechanisms can really screw people up. Psychotropic effects can be permanent as well as temporary, and the more extreme the effect is, the more likely it is to fry your brain. You’re a technologist, so using a technological means to enhance the various phases of the scientific method—inspirationalists to stimulate hypothesis-formulation, focal intensifiers to sharpen up rigorous testing—probably seems to you to be the most natural thing in the world, but you need to be careful, Ms. Hillinger, you really do.”

“You certainly wouldn’t win any awards for high-pressure salesmanship, Mr. Anderson,” she said. “If you try this hard to put all your clients off your merchandise, I’m surprised that you even scrape a living. I know what I’m doing, and so do the members of my staff. We work hard because we’ve got a world to change. We don’t take undue risks. I trust you when you say that your product is clean and safe, because I know that you were once a well-trained and highly skilled biotechnologist; I expect you to trust me when I say that I know how to use it productively and judiciously, because you know what I am.”

She didn’t mean that we were two of a kind, who ought to respect one another’s professionalism. She meant that she was a genius, to whom a mere hack like me ought to look up, admiringly if not worshipfully.

“Fine,” I said. “It’s good product. It won’t do any of you any harm, if you don’t abuse it. I’ll trust you to use it responsibly.”

“Thank you,” she said—and said no more while I made up as much of her order as I could presently supply.

She wasn’t finished, though. When I’d handed the package over and counted the cash she started again.

“You really ought to consider my offer seriously, Mr. Anderson,” she said, in what might have been intended to be a seductively challenging manner. “After all, it’s almost five years since your beloved Marie ditched you. Don’t you think it’s time to move on? The world is full of pretty women, you know.”

She wasn't trying to be cruel, even though she knew that she was putting pressure on a broken heart. She really did think that it was a simple matter of time healing all wounds and everyone having to move on eventually. She had no reason to think differently. Nobody knew why Marie had left except me—not even Marie. Where was Marie now, I wondered? Wherever it was, and whomever she was with, she wouldn't be there long.

"I have moved on," I told Judith Hillinger. "I just haven't moved away from here. I don't want to, and I don't intend to. Thanks again for the offer, and I'm truly sorry if my refusal offends you, but I'm really not interested in joining your crusade. I just want us to be good and considerate neighbors. Please can we leave it at that?"

She said yes, but she didn't mean it. As I walked her back to her boat, I knew that even if I'd had the anaphrodisiacs that helped to keep her assistants' minds on their jobs, and even if I'd been able to supply the full quota of inspiration-and-perspiration enhancers, she still wouldn't have gotten all of what she'd come for. She didn't need chemical assistance to be possessed by a touch of megalomania. The entirely natural inclination that made her determined to alter the entire future course of Gaian evolution, by correcting one or all of natural selection's worst mistakes, also made it difficult for her will to be thwarted in something as ludicrously unimportant as whether I'd sell her my silly little pharm or agree to incorporate into her burgeoning empire.

"I'd like you to come to dinner tomorrow night, Mr. Anderson," she said, abruptly, as Jacquard extended a supportive hand to help her board the boat. "Seven-thirty for eight; informal dress. I have some other guests coming—you'll be interested to meet them."

I wasn't at all sure that I would be interested to meet her friends, and I didn't like the way the invitation had been phrased as a virtual command, but I figured that it would only make matters worse if I were churlish enough to refuse. I was still keen for us to be good neighbors, and I knew that if we could do the sort of business we'd just transacted on a regular basis, it really would work wonders for my increasingly uneasy profit margins.

"I'd be delighted," I said, mentally calculating the kind of dose I'd have to take to sustain myself through a high-pressure evening.

Judith Hillinger hadn't specified how many "other guests" she was expecting, but for some reason I was thinking in terms of ten or a dozen, and of the kind of party where I could discreetly fade into a hectic background. It was quite a surprise to arrive in Withernsea, in my very best freshly laundered clothes, to find that we were only six at the table. Her technical assistants hadn't been invited.

The other four guests comprised two well-established couples, so I was tacitly paired with Ms. Hillinger in a numerical sense. No one could possibly have mistaken us for a couple, though, even if we hadn't been seated at opposite ends of the table. I felt more like her court jester—a grotesque fool included in the company as a reminder of what true mortality looked like.

The two couples were each seated next to one another on the longer

sides of the dining-table, the two men placed to either side of Ms. Hillinger and the two women to either side of me. The cosmetically enhanced women were no trophy wives, though; these were synergistic combinations of near-equals. The brace to my left were Henry Perrott and Susan Oxhey, floral engineers of high repute and impeccable respectability, who had never been charged with any breach of the Institute's regulations. The unit to my right comprised Wickham Stanton and Andrea Strettington, who were proprietors of a highly fashionable advertising agency. They had all been summoned to discuss the matter of winning the public to the cause of legal reform, in which unprecedentedly charming flowers were to supply the thin end of a stout wedge. It was painfully obvious, while we made our way through the first two courses, that neither Ms. Oxhey nor Ms. Strettington had the faintest idea why I was present, and I was in full sympathy with their uncertainty.

"I'm just a pharmer," I told them, when they began a delicate exploration of the subject. "I grow psychotropics."

"Well, the law certainly needs to be changed in that respect too," Ms. Oxhey said, diplomatically. "The follies of biotechnological regulation only date back to the twentieth century, so there are a mere dozen layers of idiot improvisation to unravel, but the follies of drug regulation go back to the nineteenth and beyond."

"We have several clients interested in that field," Ms. Strettington confirmed, unsurprisingly. "I wonder if Judith is planning some kind of alliance between the two groups of lobbyists. That might make sense eventually, as a tactical move—but not to begin with. We don't want to start off with that kind of controversial baggage in tow."

"It would be more than a mere tactical alliance," I said, just for the hell of it. "The liberation of psychotropic research and the liberation of the kind of angiosperm engineering Ms. Hillinger is interested in relate to two of the most glaringly manifest cock-ups of natural selection."

They didn't get it, and were proud enough to be annoyed by their failure. They knew all about Judith Hillinger's theories about the horrible wrong turn that angiosperm evolution had taken when early flowers plumped for reliance on insect vectors rather than producing their own antheric alates, but they hadn't a clue what I was talking about. Judith Hillinger might have, because she'd obviously take the trouble to research my background thoroughly, but she hadn't filled in her guests on the subject of my long-gone days as a firebrand champion of artifice. The two women had to invite me to explain.

"You'll find it a lot easier, of course, to persuade people that it's desirable to correct natural selection's mistakes in respect of the evolution of flowers, Ms. Strettington," I said. "After all, from the human point of view, flowers are just pretty things that hang around in vases and gardens. Making way for a more ingeniously gilded lily seems a harmless enough pursuit, and I don't suppose you'll find any substantial opposition coming out to bat for the insects that will be thrown out of work. Human workers can hardly be expected to come out on strike in solidarity with their sisters in the beehive. Psychotropics, on the other hand, have been the principal selective agent shaping the development of human consciousness

and civilization. The mistakes that natural selection made in that respect are engraved in our genes, our brains, and our cultural institutions. The task of putting them right will meet stern opposition all the way."

My listeners were adequately tantalized, and invited me to expand on the theme.

"The human use of psychotropics predates civilization," I pointed out. "It may well be the case that it was the cultivation of psychotropic substances rather than foodstuffs that prompted the initial development of agriculture, while fungal hallucinogens like psilocybin and muscarine were probably the catalyst responsible for the initial development of human self-consciousness. That's speculation—but the role of psychotropic experience in the subsequent development of religion and art has much more empirical evidence to support it. The differences between religions are explicable in terms of their origins in different kinds of psychotropic experience. Hallucinogens are associated with shamanistic cults, while the rituals associated with religions of the ancient Mediterranean—the Dionysian rites of ancient Greece, the Egyptian festivals of Hathor and the Christian Eucharist—all involved calculated alcoholic intoxication.

"The emergence and development of Western civilization and culture reflect the relative ease with which alcohol could be obtained by technological manufacture. A significant boundary between the sacred and the profane was crossed when the domestication of fermentation technology made alcohol freely available for recreational use. Intoxication was reduced to mere drunkenness and the noble Dionysus of early Greek religion gave way to the Sileni of subsequent folklore. The association of artistic creativity with psychopathology—as in the old saws relating genius to madness—is based in the conviction that artistic creativity is an inherently psychotropic process, akin to the sacred functions of intoxication rather than mere drunkenness, but essentially innovative rather than repetitively ritual. Artists have always been psychotropic pioneers, because art is a key product of psychotropic adventurism.

"The psychological rewards of psychotropic adventurism were, of course, perfectly adequate in the ancient world to outweigh considerable costs in terms of toxic side effects. Literary representations of artistic creativity, like religious representations of revelation, frequently call attention to the costliness of such inspirational experiences—the muses of old were often represented as exacting, even vampiric, mistresses. The costs of creativity were seen as necessary—a matter of paying a just price—but that's nonsensical. It's just that natural selection had fudged the whole thing, the way natural selection always does.

"The whole mess—genius allied with madness, religion allied with arbitrary commitments of faith and with fervent persecution—was the result of a catalog of biological accidents. The selective processes that created and shaped human consciousness and human civilization were essentially haphazard, based on the casual happenstance of the availability of psychotropic fungi, opium poppies, and so on, and on the fortunate simplicity of primal technologies of fermentation. If the evolution of human consciousness had been intelligently designed, human individuality and society would be much finer things. Unfortunately, we've



learned to love our horrid faults as much as our wonderful abilities, and there's never been any shortage of people willing to fight to the death to defend them.

"In the nineteenth century, when the psychotropic pharmacopeia began to expand with remarkable rapidity as the resources of organic chemistry were brought to bear on drug extraction, refinement, and innovation, it became obvious to the enlightened few that if the process of the emergence and evolution of consciousness could only have been subject to intelligent design, we might have become far better people than we are. If our use of psychotropic compounds, and the adaptation of our brains to that usage by natural selection, had only been subject to elegant and intelligent design, we would be more creative than we are, more inclined to love and affection than hatred and envy, and immune to the follies and evils of faith. Unfortunately, that particular enlightenment never gained any kind of mass support, and it's still hard to see light at the end of the tunnel. If ever there was a case for discarding the awful improvisatory legacy of natural selection and going back to basics, it's the psychotropic evolution of human nature and culture—by comparison, Ms. Hillinger's grand plan for changing the world is just glorified flower-arranging—but it's not a nettle that anyone with any real clout has yet been prepared to grasp."

I thought it was a nice example of fascinating dinner conversation, whose sophistication belied the fact that I hadn't been invited to dinner by anyone in the previous five years. It was a testament to the quality of the drugs that had allowed me to come so far from home, into such a stressful situation—but if I expected the ladies to be stunned by my genius, I was wrong. It wasn't that they couldn't take me seriously—they were far too intelligent and open-minded for any such commonplace failure of imagination—but that they could clearly see the next step in the argument, which I'd somehow contrived to forget.

"That's very interesting," Susan Oxhey said. "And what, exactly, are you doing to further that cause, Mr. Anderson?"

"Not a lot," I had to confess. "There was a time. . . ." Then I shut up.

"Judith mentioned that you once had a partner," Andrea Strettington observed, "and that the two of you were engaged in proteonomic research."

I wondered then exactly how deep Judith Hillinger's research had gone, and whether I might have mistaken the reasons for her unaccountable enthusiasm to offer me a job. Given that she couldn't possibly know the one thing that she actually needed to know, it seemed more than possible that she had made a crucial mis-estimation of where my aborted research had actually wound up.

"That's true," I said to Ms. Strettington, "but I gave it up."

They were far too polite actually to look down their noses at me, but I thought I could feel the carefully concealed contempt. Judith Hillinger had made a circus out of a courtroom and had gone to jail to defend her cause, and now that she was out again she'd built a mansion on the farthest edge of the Holderness Everglades, dedicated to the repair of one of natural selection's most spectacular errors. She was holding a planning meeting at this very moment, which was intended to launch a chain of events that would change the world. I, on the other hand, had given up.



Susan Oxhey and Andrea Strettington didn't know why, but they didn't think they needed to. The fact was enough in itself. Perhaps Judith Hillinger really had wanted me to meet her friends, in order that they might serve as shining examples to guide me back to the fold.

"That's a pity," one of the ladies said, speaking for both.

"I don't think so," I said. "Psychotropic innovation is a difficult and hazardous business. You never know exactly what you might turn up. We may be capable of cleverer planning than natural selection, but we still make mistakes—and we don't have the advantage of natural selection's blithe unconsciousness of the costs of progress. Some people are better suited to living peacefully than dangerously, sustaining the world rather than trying to change it."

"That may be the case," Susan Oxhey said, "but the world is changing by itself, in a desperately catastrophic fashion. Things were different at the dawn of human consciousness and the beginning of civilization, when we only had farmers instead of pharmerms, but Gaian evolution is far too unstable nowadays to be entrusted to the vagaries of natural selection. The laws that take it for granted that nature somehow knows best were fatuous even in the twentieth century—they're actively dangerous now. Even people who think they might be better suited to a peaceful existence have a duty to act."

"I'm fully in sympathy with your cause," I assured them both, "but I can assure you that it doesn't need me any more than I need it. I just want to cultivate my little patch of newborn land, and be a good neighbor." I was beginning to suspect, though, that Judith Hillinger was never going to be satisfied with that. She hadn't yet realized that attempting to undo natural selection's mistakes can make things worse as well as better.

After dinner I was offered the chance to sample some more of my own products, but I declined. They didn't know how much I'd already taken, simply in order to get that far. They didn't put any pressure on. They seemed intent on relaxation now—on winding down gently to the sleep they'd need to get them ready for intensive planning on the following day. I figured that I would probably need some downers myself when I got home, but I daren't take anything of the sort until I actually got there, because I still had to make the difficult journey.

I was glad when the conversation turned to lighter matters, although I found it much harder to make any sort of contribution. I'd been away too long from the tide of current affairs and the minutiae of common concerns. It was pleasant to listen, though, and occasionally to laugh. The time didn't drag at all, and it was late when I finally excused myself. Darkness had already fallen, although the clear and starry sky hadn't quite lost the last tint of summer twilight. Judith Hillinger walked me over the false coral to the bank where I'd moored my boat.

"I'll ring you when I've put the rest of your order together," I told her.

"I'll send Jacquard to collect it," she replied. "I hope you enjoyed the meal."

"Excellent food and excellent company," I assured her. "I'm sure that it did me the world of good."

"I hope so," she said. "That's what neighborliness is all about."

I felt good enough, at that moment, to forgive her for putting pressure on me to become one of her loyal band of followers. She had, after all, gone to some trouble to keep the pressure polite. Maybe, I thought, she had done all that she intended to do, and would now leave it up to me to make up my own mind.

I held that thought all the way home—but when I found out what had happened to my home in my absence my good mood turned foul on the instant. I felt a terrible surge of anger and bitterness, and berated myself cruelly for ever having been so innocent and so stupid as to believe that such a delicate velvet glove might not have an iron fist inside.

This time, the visitors who'd taken advantage of my absence had done a very thorough job. They'd smashed up all my equipment and torn up all my crops, with ruthless efficiency. They'd broken my windows, my doors, and my bed. They'd stolen my stores. They'd wrecked everything that I'd built, everything that I treasured—had done everything, in fact, short of torching the place to rip up the fabric of my life. They'd devastated my home, my work, my expectations. I was incandescent with rage. If any one of them had still been around when I'd gotten home, it would have been a matter of kill or be killed. I was well beyond the reach of sanity.

I wasn't violent in myself, though. I didn't howl or tear my hair or stamp my feet. I moved like a robot from room to room and plot to plot, looking at everything. I wasn't calculating the extent of the damage or weighing up what I would have to do to make a new start, but I was taking it all in, making sure that I didn't miss anything. I wasn't searching for anything useful or valuable that the thieves might have missed, but I turned the debris over as I went, to see what remained underneath.

Eventually, I found my phone—the phone I hadn't taken with me to Judith Hillinger's house in case it made an unsightly bulge in my jacket pocket, and because I knew full well that no one would call, because no one ever did. The indicator was lit now, though, telling me that I had missed a call.

I put the phone in my pocket without even thumbing the keypad to find out who the missed call was from—because I knew.

I knew that I had missed a call from Judith Hillinger, because I knew now that I had missed the whole import of her invitation. I knew that what she'd intended to provide was not merely an inspirational example but an exercise in contrasts, with the intention of intensifying the focus of my thoughts to an inordinate degree. "Come aboard," her whole message had been, "and this is what you can expect, as a matter of daily routine—but refuse to come aboard, and this is what you can expect, by way of a conclusion." I didn't look at the phone because I didn't need to hear her honeyed voice underlining the brutal demonstration without even deigning to mention it, adding contemptuous insult to vile injury.

If she'd come to deliver the message herself, I would have killed her, unless she or Jacquard had managed to kill me first. Fortunately, I was alone. I had no one ready to hand upon whom to exact my revenge—and even in circumstances such as these, I knew that I would be unable to leave home again without taking yet another dose of a powerful stimulant—something to obliterate my innate separation anxiety.

It wasn't agoraphobia that I had, even in the inexact sense in which most psychologists and psychiatrists used the term. It was something more basic, less cerebral—something that was anchored in the most primitive parts of the hind-brain. The damage was self-inflicted, of course, but that didn't mean that it was easily self-medicable.

I knew that I shouldn't take any more pills—I'd already exceeded the dose that would normally be reckoned safe—but I needed to confront Judith Hillinger for one last time. I didn't intend to kill her, because killing her would only have been possible as a reflexive gesture, in an uncontrollable fit of temper, but I did feel an urgent need to make it clear to her exactly what she'd done, and exactly what the cost of her ignorance had been.

The phone wasn't the only thing the visitors had left undamaged. They had stolen my stores, but they hadn't discovered my *secret* stores. They had taken my commercial products, but they hadn't taken the products that no one knew I had: the products of my wayward creative genius—assisted, of course, by the best inspirational and focal intensifiers that expert psychotropic proteonomics could produce.

I took what I needed from my secret stores, and hid the remainder away again. I'd never been utterly determined that my secret would die with me, or else I've have destroyed the products, but I hadn't expected to ever use one in anger, as a weapon of destruction, either. I'd always conserved the faint hope that they might one day be useful, once inherent hazards had been overcome by ingenious modification. As Susan Oxhey would doubtless have pointed out, though, I hadn't actually *done* anything about it. I hadn't actually tried to undo their capacity to do damage, to find the antidotes to their poison. I'd given up, running away from the problem . . . even though running away, in a crudely literal sense, was one thing I could no longer do.

With the water-soluble crystals ready for deployment, I went back to the boat and retraced my mazy route back to the nascent Isle of Withernsea and the mansion that had been raised thereon.

The house was dark; the party had broken up immediately after my departure and the guests had gone to bed.

I knocked on the door, mentally rehearsing what I would have to say to Jacquard in order to force him to rouse his employer. I didn't have to. In her recklessly brave fashion, Judith Hillinger was still answering her own door to unexpected callers.

"Daniel!" she said, although I'd never granted her the privilege of addressing me by my first name. "What on earth is the matter?"

*So she's prepared to brazen it out!* I thought. *She's prepared to keep on playing the game. Good. It'll make it all the more certain that she can't win.*

She let me in, and I made my way to the settee on which I sat during my first visit.

"I need a drink," I said. "Iced water, if that's okay."

Making a big show of alarm, she poured iced water from a jug into two tall glasses. She was still calm and relaxed, but it was the after-effect of the euphoric she'd taken earlier, not the more recent effect of a narcotic. Although everyone had gone to bed, she hadn't taken anything to make her sleep. Taking the euphoric had been a mistake, I thought. It made her

relaxed, off guard. It made her vulnerable. That was why natural selection, working on our remote ancestors, had been so parsimonious in laying on a natural supply of euphorics within the brain. Such compounds provided an exceedingly pleasant experience for people who were among friends and safe, but they rendered people in any sort of jeopardy virtually defenseless. The efficiency of pharmed euphorics made natural selection look like a very inefficient innovator, but the whole point of nature's rough patches was that they worked well enough in the kinds of hostile situations that everyday struggles for survival and the vicissitudes of primitive culture routinely laid on.

"What's happened?" she asked.

"My place has been smashed up," I told her, prepared to spell it out if she insisted on pretending not to know. "While I was enjoying myself here with your charming companions, someone did a very thorough hatchet job on the house and all my crops. They smashed everything. It's irredeemable. I'm finished—as a pharmer, at any rate. I can't afford to refit and restock. I'm finished."

I saw a brief flash of guilt in her eyes, then—but it was gone in an instant. It was just a brief temptation, rejected with confidence. She didn't feel guilty. I drained my glass in a single long draught, before she'd even taken a sip from hers, and held the glass out to her. She took it, and went to refill it. I slipped the crystals into her glass while her back was turned. It was simpler and easier than I'd ever imagined. There was more than enough water in the glass to dissolve them all, and the resultant solution was tasteless.

"I'm sorry, Daniel," she said. "Truly sorry."

"Are you?" I asked, accusingly.

She winced slightly, and took a sip of water to cover her confusion. "You don't think that I had anything to do with this, do you?" she said, defensively.

"Why would I?" I riposted.

She took another sip, and then a larger gulp. "When you first came here," she said, "I phoned Jacquard and asked him to find your place and take a look around. I didn't know you then, you see. I hadn't looked you up, or pulled your records from Big Pharma. I didn't know that you were one of us. You must have noticed, but when you didn't say anything, I assumed that you understood. I wouldn't destroy your operation, though. Is that why you came back—because you thought I'd ordered it done? Please say it isn't. If you need a place to stay—and you do, obviously—you're welcome here. Tell me that's why you came." By now, her glass was half-empty. It was all over. The crystals would take a few hours to take effect, and it would be a few more days before the symptoms became clearly manifest. The effect was irreversible.

"You didn't want to take no for an answer," I said. "You couldn't bear it. Why should you? You wouldn't take it from the law, and you wouldn't compromise, even with the law. Why should you take it from some petty pharmer who won't even get his face fixed, who insults you merely by existing?"

"Daniel, that's absurd! You have to believe me. *I would never do such a thing.*" She drained her glass.

"There's no point in denying it," I said. "I know. I didn't listen to your phone call, but I presume that's all sweet pretence as well, without a trace of honest gloating. It makes no difference. It doesn't matter any longer how you play the game. I know. It's over."

"I don't know what you're talking about," she complained. "What phone call?"

And that was when the whole edifice came tumbling down. In itself, the datum was irrelevant, but it broke the spell of illusory certainty. It reminded me that I might be wrong. It reminded me that one of the possible side-effects of the stimulant I'd taken to permit me to attend her dinner party was galloping paranoia—and that sometimes, when you're paranoid, they really aren't out to get you.

I took my phone out of my pocket and played back the missed call. It was from the communards in Patrington. Things had turned sour in Hull; our relatively honest dealers had come off worse in a feud with gangsters hawking inferior products. The rival dealers had decided to solve the problem by cutting off the supply of the superior products. They'd raided the commune while its residents were still there, and had smashed up the residents as comprehensively as the real estate, though stopping short of actual murder. Then they'd come looking for me. The communards had been desperate to tell me to get out—to run and hide.

Judith Hillinger was telling the truth. She hadn't had anything to do with it. She might well be capable of organizing a gang of drug-peddlers to do her dirty work, but she'd never have tolerated a gang who were trying to destroy quality-controlled products in order to peddle their own polluted poisons.

I cursed silently. I knew that I couldn't take back or repair what I'd done. That was the one thing, above all else, that the experience with Marie had burned into my consciousness. *I couldn't take back or repair what I'd done.*

"I'm sorry," I said, weakly. "I seem to have gone crazy—crazier than usual, that is. The call was from Patrington, warning me that the wreckers were on their way. Things have gone sour higher up the supply chain. I'm truly sorry."

"It's all right," she said, not knowing what I meant. "No harm done. You thought I was trying to force you to work for me—and I had been, in a way. It was gentle force, but it *was* force. You were right in what you said just now. I can't abide people saying no to me, even the law. It's an odd sort of compulsion—one they haven't yet found a psychotropic to control."

"Be careful if and when they do," I said. "Sometimes, the cure is worse than the disease." I downed my second ration of cold water and handed the glass back to her. She refilled her own as well.

"I wish you'd tell me why you keep throwing out these sinister hints," she said. "Obviously, something went badly wrong with the research you and Marie were doing, and it split you up irrevocably—but what's the point of keeping it all locked up inside? If you explained, maybe someone could help—not me, necessarily, but someone."

Now that the paranoia had evaporated, I could see that she had a point. She deserved an explanation, even though it couldn't possibly do her any good. She and Marie were two of a kind now, or soon would be.

"Did you hear all that stuff I was telling your lovely guests at dinner?" I asked.

"About psychotropics being responsible for the evolution and shaping of human consciousness, and for the origins of civilization, art, and culture, and what a bad job natural selection made of it? I only caught snatches—but I think I have the gist of it. I looked up your archived documents. Big Pharma never throws anything away."

"Big Pharma throws all sorts of things away," I told her. "All the research results that aren't convenient and don't fit in with their current marketing strategies, for instance. That can be very frustrating."

"So I understand," she said. "What was it, exactly, that drove you and Marie to leave and set up your own outlaw operation?"

The situation felt very odd, but I figured that I might as well explain the background. It wouldn't do her any good, and I certainly had no intention of explaining exactly how relevant it had just become, but she did deserve an explanation, and I had nothing better to do. In any case, I thought, talking might distract me from wanting to cut my throat.

"We were working on potential treatments for the spectrum of autistic disorders, especially Asperger's," I told her. "It was an awkward area, not least because some Asperger's sufferers get compensation for their social difficulties in terms of unusual mental abilities, especially calculative facility and feats of memory. The holy grail of that kind of research was finding a way of treating the undesirable aspects while retaining the beneficial ones—eventually leading to a means of inducing the beneficial abilities in healthy individuals without risk—but Big Pharma doesn't go questing for grails. Big Pharma just wanted a marketable treatment—a way to achieve a temporary suppression of symptoms, which would keep the punters coming back for more and more.

"The general line of thought was that the Asperger's-related ability to do complicated math or memorize prodigious amounts of information must derive from a similar process to those stimulated by focal intensifiers, so almost all the past research had dealt with chemical descendants of ADHD treatments and the latest digitalid derivatives. Sometimes, though, you can get superficially similar results from very different causative processes. Because the symptomatic spectrum extended all the way from severe autism to what used to be termed 'ordinary male behavior'—fascination with sports statistics, collecting fervor, that sort of thing—Marie and I thought that most of the researchers were looking in the wrong place. We thought that they shouldn't be looking specifically at the metabolics that were most active in the cerebrum, but at something more basic, maybe even functioning in the hind-brain.

"What I said to our guests about the initial development of agriculture being associated with psychotropic cultivation is an idea I took seriously. In itself, it doesn't deny the common assumption that settling down was a *choice*—a rational response to newly perceived opportunities. But I wondered whether that assumption might be wrong. Throughout the animal kingdom, you see, you find contrasts between different basic behavior patterns. Some animals are permanently sedentary, some incessantly no-



madic, but most have well-defined sedentary phases in their life and well-defined migratory ones. That's what the logic of natural selection favors: most animals settle down temporarily to breed, but they don't stay where they are thereafter, because the ones that thrive in the evolutionary story are the ones that spread most widely. How that's determined chemically we don't know, but there has to be some kind of chemical mechanism that's effective even in the most primitive parts of the vertebrate brain.

"I wondered whether that mechanism might have something to do with the impulse to settle down—that there might be some kind of trigger that had been squeezed in some of our remote ancestors as a result of haphazardly selective psychotropic ingestion. The trigger would still be there, you see, even if it had fallen out of use—that's the way natural selection operates, by applying layers of patches. I wondered, too, if it might be the same psychotropic complex that was involved in the autism spectrum: calculation and collecting are, after all, both closely associated with the behavior patterns inherent in settling down and managing crops.

"I assumed that what we were looking for was some kind of two-way switch controlled by a feedback mechanism—a feedback mechanism that could not only be interrupted but overridden, by producing compounds that had more powerful effects than the naturally occurring ones. The basic problem of proteonomic analysis—that most proteins the body produces are transient and only produced in specialist cells, making them hard to detect and trap—is, of course, further magnified in psychotropic proteonomics, where the compounds are not merely transient but tend to occur in complex families produced by different combinations of exons in the same intimate gene-groups. It was a laborious business, but I figured that as long as I was looking in the right place, I'd eventually stand a good chance of trapping one or more of the family. I was right.

"It was when I reported back on the compound I'd identified that the company pulled the plug on us. It wasn't the biochemists that blackballed us but the product-development people. The work was theoretically interesting, but they couldn't see the treatment potential. They couldn't see a route from discovering a psychotropically activated trigger, which might have been responsible for the sudden changes of behavior that led to the birth of agriculture, to producing an effective treatment for Asperger's."

"They did have a point," Judith Hillinger put in.

"Yes they did," I agreed. "A better one than they knew. I tried to argue that if we could discover the biological bases of such mental phenomena as lightning calculation, eidetic memory, and collecting fervor we might not only be able to preserve the more desirable aspects of some Asperger's cases but also produce them at will, but that sort of objective wasn't in their sights. I also argued that if we could find a way to tweak the basic switch that would turn hyper-agriculturalists back into nomads, we might begin to get a grip on an autism treatment, but it didn't stop the ultimatum. Change direction, or go. We went.

"We set up our own lab, trying to continue the work with the aid of stolen materials—materials that Big Pharma had been perfectly content to throw away. We supported ourselves by pharming the kinds of drugs for which there's always a steady demand. I can't honestly say that we



got much further, in terms of the biochemistry, but I did manage to engineer half a dozen analogues of the compound I'd trapped. We had no one to test them on but ourselves, so that's what we did. We assumed that any effects we detected would be temporary."

"But you were wrong?" Judith Hillinger prompted, when I paused.

"We were wrong," I agreed. "Delicate feedback mechanisms, once disrupted, sometimes stay disrupted. Psychoactive compounds can't always be metabolized in the flesh that natural selection designed. Sometimes, like the prion proteins that cause BSE, they not only stick around but multiply, reproducing themselves by means of a process far simpler than DNA/RNA coding. We were idiots. It only required one dose to fuck up our systems. I was the first guinea pig, and it seemed at first that the compound I'd taken hadn't done anything much at all, so after a decent interval we tried the second on Marie. Again, the result was slow to appear, but eventually it did."

Judith Hillinger was a clever woman. She'd followed the argument every step of the way. "She didn't leave you because she'd fallen out of love with you," she guessed. "She left you because the psychotropic you'd engineered—more powerful than the naturally occurring compound—turned her back into a nomad. She was possessed by *wanderlust*, more powerfully than any actual nomad ever was. She couldn't stay in one place any longer. She had to move on—and on, and on. Whereas. . ."

"I couldn't leave," I finished for her. "I got the opposite effect. She can't stay in one place for long without being heavily sedated; I need stimulants to drown out the separation anxiety I get if I leave familiar ground. We both get side effects from the medication, mine being periodic fits of paranoia. Neither effect was temporary, and all our attempts to reverse or counter them came to nothing. The hind-brain's a stubborn brute, far less amenable to manipulation than the cerebrum. You change it at your peril. I tried a lot of counter-treatments. At first, they simply didn't work—then they began to trigger violent reactions; the immune system had got involved. I had to stop. I still have little or no idea what the long-term effects might be, but at least I can still think about the problem, in a brooding sort of way. Marie can't. She lives for the moment nowadays—but she is still alive, as far as I know. Last time I heard from her, she seemed happy. She doesn't know why she's the way she is, and she doesn't care. She just keeps on moving on. In my fashion, I've moved on too—I just haven't gone anywhere. I can't. I think I need to go home now."

"You said they'd smashed it up."

"They did—but that's not the point. I need to go back."

"I'll help you," she said. "I'll help you rebuild. You don't have to sell me the place, or work for me. I can get you protection from the rogue dealers, I think. We can work through this, as good neighbors should."

I burst into tears then, because I knew I'd blown it. I knew that I'd ruined everything, and had thrown away my last chance to sustain or improve my life. I couldn't even tell myself that it wasn't my fault—that it was just an unfortunate side effect of wayward psychotropics—because it *was* my fault, precisely because it *was* an unfortunate side effect of wayward psychotropics.

I went home. I couldn't bear to tell her what I'd done, so I just went home to my broken bed, to begin my long and lonely fight for survival. I understood what I'd done, not merely to my good neighbor but to my good neighbor's great crusade. I had changed history, and not for the better. I had become an unwitting defender of natural selection, an accidental enemy of intelligent design.

After a while, stray alates stopped turning up on the verandah. Judith Hillinger called me to tell me that she was leaving, because Withernsea wasn't the right place to begin the Revolution. She didn't know exactly where she was going, she said, but she'd know it when she found it.

I didn't contradict her, although I knew she never would. She didn't know what had happened to her, but it didn't really matter, because she would soon be incapable of caring even if she could still understand the explanation.

She'd probably live for a long time yet, I told myself, and her money would ensure that her new lifestyle was as comfortable as it could possibly be. She'd be happy, but she wouldn't be attempting to correct any more of evolution's errors—because I'd corrected in her the most basic error that natural selection had ever made in its ham-fisted shaping of human nature.

I'd cured her of the silly urge to settle down, and the exacting burdens of unfailing calculation, excessive memory, and relentless collection.

*If only, I thought, I could do as much for myself. ○*

## THE CAPACITY OF COLD

Cold  
will encompass  
all.

It is  
warmth  
that is rare  
in the vastness.

Even here  
on this island Earth  
we feel  
zero  
in our bones.

—Roger Dutcher

# KALLAKAK'S COUSINS

Cat Rambo

Since her participation in Clarion West in 2005, Cat Rambo's publications include stories in *Strange Horizons*, *Clarkesworld*, and *Subterranean*. Her collaboration with Jeff VanderMeer, *The Surgeon's Tale and Other Stories*, appeared in December 2007. She is the co-editor of *Fantasy Magazine* and readers can learn more about her at [www.kittywumpus.net](http://www.kittywumpus.net). In "Kallakak's Cousins," her first story for *Asimov's*, Cat choreographs the complex interactions of aliens with aliens as they try to get along (to one degree or another) on a human space station.

**T**he more annoyed Kallakak got, the sleepier he became. By the time he found himself in the small trapezoidal office that served the Undersecretary of Spaces as a waiting room, weariness washed over him in waves threatening to carry him away into sleep. His mid-hands, which he usually employed for fine work, were shaking with fatigue. He slapped open a pouch and took out a syringe with an upper hand to jab into the opposite arm's pit, preferring that to the soft underside of his stumpy tail's base. He grunted once as the needle pierced the thick skin, and felt the chrome-edged wake-up shock through his nervous system.

The rustle of the space station's ventilating fans sharpened to a whine as the wake-up's second component jolted his metabolism. The only bad side-effect was his bladder's tightening, a yank on his nerves that made him wonder how far away the nearest eliminatory was. He allowed himself to feel gratitude for the lack of caff as his breathing and heartbeat slowed from the initial jolt.

The light was set to an annoying wavelength that scraped angrily at his eyes. Somewhere down the corridor someone kept walking back and forth, a metallic echo of footsteps. Three or four rooms away, he thought, and wondered whose waiting area they had been put in.

"Mr. Kallakak?" a woman said from the doorway, her voice officious and too loud to his tender ears. He flattened the frills atop his head, a rude

gesture, but it dampened the noise's edge. She probably didn't know Bal-label etiquette anyway.

Unfortunately, her expression said she did. She said nothing, just turned and gestured him to follow. They traversed a winding corridor up several floors and into the Undersecretary of Spaces' office, where the Undersecretary and two other humanoids awaited him.

"Mr. Kallakak, is it?" the Undersecretary asked, glancing at the pad on his desk for confirmation before Kallakak could reply.

"It's a great pleasure," Kallakak said, preparing to launch into the speech he'd prepared, but the man simply pointed him to a stool.

The Undersecretary wore no uniform, which made Kallakak hope for a moment that he was a long-timer, someone whose position in things as far as the government was concerned remained the same, and didn't shift with every change of the government. But the official's hair was growing out of a military crew-cut, about two weeks' worth. Kallakak resigned himself to another iteration of the negotiation for his shop's location that he had undergone, by his count, thirteen times so far.

The room's two other occupants sat quietly. Both were burly and broad-shouldered, with the look of people who had grown up in substantial gravity. Their augmentations were utilitarian, with no pretense towards naturalness: thick metal ridges protected their eyes and laser lenses set over the eyes shifted with the light as they moved. Dark blue plating layered over their arms. Kallakak did not doubt that there were other, more dangerous additions on their forms.

"The Jellidoos here say that they have a prior claim to the space where your shop is located," the Undersecretary said.

Startled by the bluntness, Kallakak looked to the pair. They stared back, expressionless. He had prided himself on his ability to understand shifts in human expression—it was of great value to him in negotiations with customers—but these two were unreadable to him. A wave of torpor washed over him, but he would not inject himself here and show them information about the angry terror their assertion had inspired.

"I have been there three standard years," he said. "What is the prior claim?"

"They have been offstation and thought that their representative was occupying the space," the Undersecretary said. "Their claim dates back four standard years."

"They had no way of checking on their claim?" he said politely.

"Our representative deceived us," the woman said. "Now we have returned in person to take up our merchandising effort again."

"It is a very small and oddly shaped space," Kallakak said. "Surely fine beings like yourselves have access to significantly grander locations?" He looked to the Undersecretary. "Or perhaps such might be found?" He wished the Undersecretary had met him alone; it would be easier to find out how much of a bribe was needed.

"Despite spatial difficulties, it is a premium location," the woman said. "Just above the Midnight Stair and across from the Convention Hall."

Kallakak nodded to assert his command of human gestures. "May I ask what type of merchandise you intend to sell?"

"Much the same merchandise that you currently sell," she said. She permitted a smile to cross her lips. "We would be glad to give you a good price on your current stock."

He let his eyes slit to demonstrate annoyance while he thought frantically. Would it be best—or even possible—to take his loss and see about finding another location, build up merchandise stocks again?

It would be laborious to clear his things out and re-establish a new shop: across from the Convention Hall was, as he and the other merchants knew full well, a location rivaled only by the entrance to the university or the booths immediately by the port, where every sailor and traveler had to pass. He did not think any other location he could afford would let him stay afloat. Sooner or later, his capital would dwindle bit by bit and destitution would come knocking at his door.

"Will the matter be examined before a court?" he asked, and caught the twitch that might signify the Undersecretary's hope to have avoided the formalities. But the official only said "Yes, of course." Pulling open a window on his desk, he studied it. "The next opening is . . ."

"We would prefer to have it done quickly," the female Jellidoo said, and the official continued on as though he had not heard her, "five days from now."

That was astonishingly quick, and Kallakak wondered if the two realized it. They stood, and Kallakak remained in his chair, hoping to speak to the Undersecretary alone. But they continued standing, looking at him until at last he resigned himself to exiting with them and rose to his feet in turn. All three bowed to the Undersecretary before leaving.

Outside, the Jellidoos fell in step with him, one on either side, as he walked towards the lift.

"We realize this is an inconvenience for you," the woman said. "We are prepared to offer you compensation for the trouble it causes."

"How much?" he said, tapping the lift call.

"Five thousand standard credits," she said.

While substantial, it was not enough to make up for the space's loss, which netted him that much again every few months. He grunted non-committally.

"Sometimes we don't realize that what we want isn't good for us," the man said, speaking for the first time. He stared intently at Kallakak.

"Dominance rituals do not work well on me," Kallakak said, roughening his voice to rudeness. "I will see you in five days in the court." He decided not to burn his bridges too far. "I will tally up the cost of my goods by then and will have a definite figure." Let them think him acquiescent while he tried to find another way to save his shop. He stepped into the lift, but they did not follow him, simply watched as the doors slid closed and he was carried away.

Making his way back to his quarters, he saw three figures standing before it. He paused, wondering if the Jellidoos had decided to lean on him further. The trio turned in unison to face him, and he recognized them with a sinking heart. The cousins.

Kallakak had come to TwiceFar space station ten standards earlier

with his wife, Akla. Both were Balabels of good family; their births had been normal and each's twin had gone on to a respectable mate and business of their own.

But Akla had a set of cousins who had been born not in a pair but a disreputable and unlucky triad. Moreover, they had continued to stay together long past their adolescence and therefore never matured into sexuality. Not unheard of, certainly, but unusual.

They had not been successful in business, and Kallakak had grown used to hearing Akla's stories about their efforts. At times she had been quite witty about it but without her presence to remind him of their existence, he realized he had lost track of them. He had not seen them since he and Akla had joined together, back on Balabel, but he recognized them: they were oddly graduated in size, not the same height, and had a peculiar slump-shouldered appearance.

The tallest—what was its name?—approached Kallakak.

"You may not remember me, sir," it fluted at him, its voice uncertain. "I am Tedesla, and these are my siblings, Desla and Sla. We are related to your wife, Akla."

"She's gone," he said roughly. The corridor lights buzzed brittlely behind his head. He could feel a continuing push at his bladder, despite the several eliminatories he'd visited on the way home.

The cousins exchanged glances and conferred in whispers as he waited. He heard the smallest, Sla, say, "But we have nowhere else to go!" and reluctantly took pity on them.

"Come inside," he said.

They followed after him, crowding the narrow room that served him as eating and sleeping quarters as well as a warehouse of sorts. Double layers of mesh crates were stacked up against one wall, and others had been assembled to create the furniture.

A bed made from a pallet of rugs covered with film plastic sat near two metal boxes pushed together to make a table. He pulled a tab on a caff box, setting it to Heat and putting it on the table before rummaging for cups in a box of chipped mugs showing the station's logo. Glancing at the cousins, he grabbed for dried meat as well and opened it.

Two cousins sat on the floor, interspersing rapid bites of meat with gulps of caff, while Sla did the same, cross-legged on the bed, its bones still adolescent soft and flexible. Kallakak averted his eyes and focused on Tedesla.

"We won a prize," Tedesla said. "A ticket for all three of us to the station."

"A prize?"

"For our shopping, for being the one-millionth customer at the new grocer's."

"A prize for shopping?" Kallakak considered the idea. It would be easy enough to do something similar with his shop—if he still had it after five days, he thought sourly. He bit into a meat stick, looking at Tedesla.

"How much money is left?" he said.

Tedesla shrugged. "That's all it was, a ticket."

"And one to go back on?"



"No." Tedesla hesitated. "It was supposed to be round trip for two, but there were three of us. So there is a trip back for one."

"Which one?"

They shrugged in perfect unison. As though evoked by the gesture, he felt the day come crashing down on him, sleep crawling over his skin like an insect swarm.

"You can stay until we get things settled," he grunted. Setting his cup down, he moved over to the bed, Sla scrambling out of his way. He laid down with his back to them and fell downwards into sleep.

In the morning, he saw they had tidied away the food from the night before. He thought they might have gone exploring, but when he pushed the corridor door open, he found them sitting outside in the hallway. They rose to their feet.

"I am going to the store," he said. "Have you seen it already?" They shook their heads and followed him.

"I named it 'Akla's Wares,'" he told them as he walked along. "I stock the things she liked: Corrinti bubbles and other sparkles, things tourists buy."

"She liked such things?" Sla asked.

"She does," he said.

They turned the corridor and headed up the Midnight Stair, moving along handholds rather than taking the stairs, the gravity feather-light around them. Kallakak's muscular arms moved him along more rapidly than the majority of pedestrians along the hundred meter wide tunnel, its sides lined with black stairs that showed no sign of scuff or wear.

"It wasn't smooth going at first," Kallakak said. "Twice I got robbed during sleep periods, so I hired a mechanical to run it while I wasn't there."

"A mechanical?" Tedesla asked.

"A robot," Kallakak said. "Most of them are trying to buy themselves or others free, they take on whatever labor they can manage. Alo2 is a good sort. Funny sense of humor, but a good sort."

"We could watch over the shop," Sla said. "With us here, you wouldn't need anyone else."

He didn't answer, but paused in the doorway of the pharmacist. "The usual," he snapped at Ercutio, who replied as he passed over the pack of juice bulbs, "If you wouldn't retain your fluids in your body so much, they would not cause the infection."

He ran his card through the reader to pay. "I know, I know," he said.

"Who are those with you?" Ercutio nodded at the cousins, who stood backing Kallakak in a little ring.

"Cousins," he said. He toothed through the seal of a juice bulb and sucked down the salty-sweet fluid, mixed with antibiotics.

"I heard there's some trouble with your space," Ercutio said and Kallakak paused before hurrying out of the doorway. "Some," he said. "I'll know more in a day or so, need to size things up."

They moved along towards the shop. The name "Akla's Wares," written in standard and red Balabel script, rode the wall above the doorway, which Kallakak had widened at his own expense in order to make it easier for customers to enter.



Alo2 looked at them from where he sat beside the counter.

"We are Kallakak's cousins. You will no longer be needed," Sla told the mechanical in an officious tone.

Kallakak hastened to say, "Don't listen to it. Visitors from home. Go look at the merchandise, you three, while I catch up."

Alo2 registered the knowledge with a flicker of the blue lenses that served it as eyes. Its surface was matte steel, marred in places with dents from years at dock labor. "The shop took in 541 standards," it said. "A party of six sailors bought twelve souvenir items at 2:11. Two Jellidoos came by but bought nothing."

"Did they say anything to you?" he asked.

"They wanted to know the sum of my wages," Alo2 said. "I misrepresented them as considerably more than I make."

"Good," Kallakak said enviously. He was incapable of lying; the effort of it caused a purpling of the ear frills that was unmistakable to anyone knowing much of Balabel physiology. While a master of understatement and misdirection, he envied Alo2's ability to overtly misstate things.

"Jellidoos are tough to deal with," Alo2 said in a statement of absolute truth and Kallakak nodded in glum agreement.

"They used to use a lot of mechanicals," Alo2 said.

"Used to?"

"They're superstitious. We spread a rumor that mechanicals hold souls that have been displaced from bodies—ghosts. Not all of us, mind you, just a few. They're terrified of ghosts and death."

"Too bad we can't convince them this place was once a body repository or something," Kallakak said. He looked around at the walls, which were a dull layer of cloudy plastic over gray metal.

It was unclear what use the station's creators had meant to put the space to centuries ago. Finding it unused except for storage, Kallakak had submitted petitions to three versions of TwiceFar's constantly changing government, achieving success on the fourth try. He touched the counter, a silvery glass slab he'd found in a cast-off sale at the university, and swore.

"What?" Alo2 asked.

"I've put too much work into this to see it taken away," he said, feeling tired. "It is the only thing I have to remember Akla by. It is her past—my future."

He turned to the cousins. "All right. Desla, sweep the back aisles, Sla, wash the wall—you'll want to unpin those scarves first and then put them back up. Tedesla, sort that box of mail cards, and make sure they're

## MOVING?

Please send both your old and new address (and include both zip codes) to our subscription department.

Write to us at: *Asimov's Science Fiction*, Dept. NS, 6 Prowitt St., Norwalk, CT 06855-1220. Or on our website: [www.asimovs.com](http://www.asimovs.com)

grouped together by language. Alo2, can you stay a few more hours and show Tedesla how to operate the credit reader?"

"Where are you going?" Sla asked.

"To do some research."

"Huh," Bo said after he'd listened to the whole long saga. "Jellidoos are bad news; they know law inside and out."

"You'd think that they wouldn't know TwiceFar law," Kallakak said bitterly. He took a sip from the fragrant tea Bo had served him, redolent with yellow, straw-like flowers that smelled like honey and apple.

"They've probably been waiting for a turn that would allow them to do this," Bo said. His height had been augmented to over two meters and that, coupled with his ferocious black eyes, helped him keep his own establishment orderly. "A lot of people watch the station to see how things change, watching for opportunities. But how can they claim your space? I thought it was unoccupied until you moved in there."

"It was," Kallakak said. "But there was a caff cart stored there for three days at one point, a temporary measure. They are claiming occupation based on having owned most of the cart."

"Feh," Bo said. "So you can make it too expensive for them to force you out, I suppose . . ."

"Hard to do. In that location, they can recoup a very large sum quickly. Larger than I can raise against them."

"You can wait them out and see what happens next time the government shifts."

Kallakak shook his head. "Then they'll have been the most recent occupants—most law will lie in their favor."

"It's a shame," Bo said. "I remember when you arrived—took you a year to save up enough to buy citizenship, let alone start to make claim to that space. When you and your wife first came . . ." The sentence trailed off in awkward silence.

"All done and gone," Kallakak said. He drank the last of his tea, now cool.

Back at the shop, he swore when he saw the mess Sla had created. The scarves, draped against a wall still damp from washing, had bled mottled dyes onto the wall's plastic.

"I didn't mean to," it said, shrinking unhappily into itself. Tedesla came up behind it and touched its shoulder, giving Kallakak a look that reminded him of Akla. By the end, she had learned to play his guilt-strings like a musical instrument. The emotion glittered in his mind like Sla's unhappy eyes.

"It doesn't matter," he sighed. "Take those down and fold them. We'll sell them to the Jellidoos for a decent sum, I'm sure." He frowned at the colored wall; the pink and green dye had left pale, feathery patterns like fern leaves.

Late that night, he heard them whispering together, admonishing Sla. After they finished, he heard the smallest cousin weeping and then the other two comforting it.

"Of course it is strange here," Desla said. "But tomorrow we will go and get the little cream pastries from the Food Court that the woman was talking about. Sweet and light as air, she said."

"We'll bring some back," Desla murmured. "He deserves to be taken care of, now that he no longer has his wife."

"He never speaks of her," observed Tedesla.

"Never," said Sla. "Do you think she died of something gruesome?" The other two shushed it and lapsed into murmurs that he couldn't make out.

When the hallway lights brightened to morning shift white, he let the increased angstroms tug his eyelids awake and drank another of the sour bulbs. His bladder felt much the same as it had the day before, irritated and a little sore, but at least it was no worse.

Sla was cheerful. Kallakak gave the three the day free, with a handful of coupons and vouchers he had gathered through exchanges with other merchants.

Alo2 was sweeping out the aisles as he entered.

"Where's your entourage?" it asked. He shook his head. "Sent the pack of them off to the Food Court."

"Good. What are you going to do about the Jellidoos?"

"There's not much I *can* do," he said. Moving over to the card-reader, he tapped at it, checking the totals. "I'm going to see the Undersecretary today. Can you watch over the shop again?"

"And the cousins?" the mechanical said.

He shook his head. "I told them they were off today and to meet me at evening to eat together."

"They tried to ask me questions about Akla yesterday."

"What did you say?"

"That I didn't know anything. I think they don't yet understand that non-Ballabel can lie. Not that I'm complaining. I had the middle one fetching and carrying for me yesterday when I described the pain that sudden movements caused to my resistors."

He laughed. "They'll learn soon enough, I'm sure." He drank another juice bulb, feeling his outlook improving. His cheer was confirmed when the Undersecretary saw him with surprising promptness, but the emotion fled when the official bluntly mentioned the sum the Jellidoos had already provided.

"I can't match that in the short term," Kallakak ventured. "But perhaps over the course of time . . ."

The official shook his head. "Things change too quickly around here. There hasn't been a government that's lasted more than six months in over a decade," he said. "Who's to say what could happen? Better to grab what I can while I can."

"All right," Kallakak said.

Bo was similarly discouraging. "Chimp down in the Click Bar said the Undersecretary picks up lonely sailors every once in a while, treats them to a good meal and usually breakfast too, isn't too picky about looks. I don't have anyone that could lean on him."

"And the Jellidoos are better at brute force leaning anyhow," Kallakak said. He sighed. "Thanks anyway."

Coming home through the Food Court, he came across a noodle vendor screaming at the cousins, who stood in a line before the livid, red-faced man, their upper and midhands clasped together in embarrassment.

"What's happened here?" he asked, hurrying up.

"They pick up soup unit, get it all mixed around, bad programming!" the man yelled, his voice grating across Kallakak's ears. "Expensive machine!"

"We were just looking at it," Sla said sullenly, its tail lashing.

"We thought that you might get one for the shop," Desla said.

"How much to fix?" Kallakak said to the merchant. He wished he could lie, wished he could pretend this trio, so clearly linked to him, were of no relation, no consequence to him. But their every moment proclaimed them his.

"Fifty credits."

"Give you ten here and now or twenty store credit."

"Fifteen here and now." The merchant swiped Kallakak's card through his reader, punching in the numbers as he eyed the cousins. As though his money wasn't flowing away rapidly enough, Kallakak thought.

"You're not paying him, are you?" Sla asked. "We were just looking!"

"Apparently you punched a few buttons," Kallakak said tiredly. They followed him as he circled around the entrance of the Midnight Stair, towards the shop.

"You could sell a lot of food in your shop," Sla said.

"We aren't zoned to sell food."

"But you sell the chocolate and fruit boxes."

"Those are sealed."

"Oh," Sla said.

"Tonight you can watch over the store with Alo2," he said. "First two of you in a five hour shift, then Desla by itself."

"All right," Tedesla said agreeably.

"What will I do by myself?" Desla asked, alarmed.

"You can go sit in the shop with them. You just won't be working. Although if you get bored, Alo2 can show you how to weave hiber baskets. We sell a lot of those."

"And what will we do when Desla is working?" Tedesla asked. "Sit and weave baskets as well?"

"You may also wish to go and fetch yourselves some food at that point, and perhaps bring some back for Desla. In such a case, do not look at or touch any machines, but allow the vendor to hand you the food," he said. "At any rate, I will see you in the morning."

But in the solitude of the room, things felt empty. Much as they had after Akla's departure, a store full of strange echoes and spaces that could not be filled with boxes of Corrinti jellies and bioluminescent inks. He drank another bulb of medicinal juice and chewed his way through a pack of dried protein flakes, washing them down with swallows of meaty, buttery tea, while his midhands spread lotion on each other, brushing away bits of accumulated, overgrown skin and picking away the cuticle in order to burnish each sharp, curved claw.

"I do miss you," he said aloud to the empty air. "I do."

\* \* \*

The next day, Desla managed to flood the shop. All three had had digestive problems due to an excess of cream pastries and the eliminatory near the shop had overloaded and backed up. He waded through an expanse of dirty water, opening the shop door to see more water pooling in the aisles, bearing on its surface a film of dust, lint, and scraps of packing material. He turned the water off at its source and sent for a registered plumber before setting the trio to mopping. They carried the water, four dirty buckets at a time, to the recycler so he could reclaim at least some of the fee.

"Look," he said to Tedesla. "The three of you might look around for another job. I will lose the shop in three days to others with a prior claim, and I will not have anything for you to do."

"We can do that," Tedesla said. It patted his arm kindly. "Do not worry, Akla's husband. We will help provide for the household, and keep you in the style which she would have wished."

"That's not what I meant," he said. "I mean, I will have an excess of goods and no place to put them while I look for more shop space. The room will be quite full."

Tedesla's ear frills quivered eloquently with disappointment, but all he said was "I see" before he went back to helping mop the water from the floor.

In between researching ways to save the shop, he tried to find them living space, but there was an influx of visitors—a trade market was being held within the next three days—and so he resigned himself to another week of their presence. He kept them on a schedule opposite his own, pointing out its efficiency in keeping the store constantly open, and paid Alo2 double the usual wages to keep an eye on them.

Meanwhile he found a private access unit and searched through endless datanets, trying to find a legal loophole in between constant trips to the eliminatory to soothe the burning in his groin. He stopped on the way home for more bulbs and ignored Ercutio's questions. Every search had closed another door. When he got to the store, he found Bo waiting with advice.

"One of the new employees came from a Jellidoo background, so I asked them about the culture," he said to Kallakak. "You need to be careful of what you say to them. Their specialty is libel and slander, and they'll provoke you into saying anything that you can possibly be sued for."

"As though taking the store were not bad enough?" Kallakak grumbled.

"Rumor says we might be in for a governmental tumble," Bo said.

"So soon?"

"This has been a pretty apathetic government; a lot of old-timers aren't too happy with it."

"But still, if it were to change within two days, that would be a quicker change than any I've seen here," Kallakak said.

"True," Bo said, "But I thought the mention of it might cheer you up. How are your new additions doing?"

"They haven't done much so far today," Kallakak said. "Sla tried to eat a tourist's pet last night, apparently, but Alo2 stopped it in time."

Bo snorted.

"They're coming for dinner anytime now," Kallakak said, glancing at the light level in the corridor.

But the next people to come in the door were not the cousins, but rather the pair of Jellidoos. Kallakak smiled politely at them and signaled unobtrusively with a midhand to Bo, who drifted nearer, staring at them.

"We have heard that there have been acts of sabotage in the shop," the man said. The woman pointed at the colors on the back wall. "And water," the man added. "There has been a broken pipe?"

"A small problem, quickly solved," Kallakak said. Sla and the others came through the door just in time to catch the last.

"Is there a problem?" Sla asked. The three came to look at the Jellidoos as well.

"We do not want any more damage to our property," the man said. "We are prepared to offer a sum for immediate vacancy. Or else we will begin charging for damages to what will be our property."

"Never!" Sla said indignantly and behind him, Bo rolled his eyes at Kallakak, mouthing the words "libel and slander."

"You have no right to oust Kallakak! You are very bad people to do so!" Desla added.

"Tell me more," the woman said, listening avidly. "Why should we not oust him?"

"He named this shop after his wife and she remains to watch over it, with love and affection!" Tedesla said, despite Kallakak's frantic signal.

Kallakak opened his mouth to correct it, but then shrugged and remained silent.

"How so?" the man demanded. "Do you mean she still lives here?"

"In her death, as in her life, she remains by his side!" Sla declaimed. "Looking after him with eternal devotion."

"A ghost!" the woman exclaimed, paling. She and her compatriot exchanged glances.

"It is a trick," he said, but she shook her head. "Ballabels cannot lie," she said. "See his ear frills?"

Although they could, Kallakak thought, neglect to correct mistaken impressions. Akla had left aboard a freighter, saying that she wanted to "find herself," and had never come back. No sane Ballabel chose a life of solitude, and he had not wanted to correct the cousins in thinking her dead. She would have, he thought, preferred that.

"Will you be withdrawing the claim?" he said to the man as the Jellidoos pushed their way through the cousins towards the door. The woman spat and made a gesture he did not recognize as his only reply.

"Nicely done," Bo said as she exited.

Kallakak beamed at the cousins with effulgent satisfaction. Fumbling behind the counter, he took out an unopened decanter of spirits and fumbled at the stopper.

"So the shop is safe?" Tedesla asked.

"Yes," Kallakak said, pouring drams into mugs patterned with glittering stars.

"We don't need to get jobs after all! We can keep working in the shop!" Sla said.

"Well," said Kallakak. "I don't know if I'd go that far." ○

Steven Utley tells us he is “still the internationally unknown author of the story collections *Ghost Seas* (Australia, 1977), *The Beasts of Love* (USA, 2005), and *Where or When* (United Kingdom, 2006).” An anthology that he co-edited with Michael Bishop, *Passing for Human*, will be out soon from PS Publishing. Unknown or otherwise, this author’s fiction, poems, and, most recently, a cartoon, have been appearing in *Asimov’s* since 1977. In his eerie new tale, we catch a glimpse of ghosts and machines and . . .

# THE WORLD WITHIN THE WORLD

Steven Utley

“**D**amn jump station’s haunted,” Summers growled, frowning at the momentarily dormant machine. One of the monitors had just beeped inexplicably. He looked around at his co-worker, Cullum, and their two visitors, Lane the Navy doctor and Cutsinger the physicist.

“Summers here thinks we have spooks,” said Cullum. “I think we have a lunatic.”

“Really. Spooks.” Summers nodded at the monitor that had beeped. “It’s always doing that.”

“It’s always *done* that,” Cullum said, “as far back as I can remember.”

“Short circuit somewhere,” Cutsinger said.

Summers shook his head vehemently. “We’ve taken it apart and replaced everything in it six, eight times. It *isn’t* electrical. It’s—” he pondered word choices for a moment “—ectoplasmatical.”

“I have no idea in hell what you’re talking about,” said Cullum, “and I’m willing to bet you don’t, either.”

Summers addressed himself to the other two men. “It *isn’t* just the monitor registering something when there shouldn’t be anything there to register. Every now and then, when we’re alone in here, I sense we’re *not*



alone in here. Like . . . disembodied entities are moving around and past and *through* us. Gives me kind of a little chill down my back. You never get those?"

"Everybody gets those," said the doctor. "Just a glitch in the nervous system."

Cullum made a wry face at Summers. "Disembodied entity' is kind of an oxymoron, isn't it? You're probably just high on ozone."

"A ghost is supposed to be—"

"*Supposed* to be!"

"—*supposed* to be some kind of psychic residue left at the scene of a violent or at least traumatic incident."

"Yes, so?"

"So, what could be more traumatic than going through a spacetime anomaly, being shot across hundreds of millions of years into prehistoric times? We all came through, and it felt like being worked over with a baseball bat."

"Maybe that's the answer," Cullum said drily. "You got hurt in your head when you came through." He nodded significantly at Dr. Lane. "Undiagnosed concussion."

"Perhaps," said Cutsinger, "the blip on your monitor is an electronic echo of the person who goes through. A kind of human non-being. It might even have the person's memories and ideas and emotions."

"What about the *stuff* that comes through?" said Cullum. "Ghostly toilet tissue for ghostly bums?"

"Go ahead," Summers said in an offended tone, "make jokes, reduce the epistemological to the scatological."

"At least I'm making *sense*. Do you even know what any of the words you use mean? Listen. The blips last less than a second, right? So what good would memories—never mind ghostly supplies and equipment—what good would ideas and emotions do your ghost?"

"To a ghost a split-second might be a whole eternity."

"With all the people who have come through here, to say nothing of all the *stuff*, why aren't the monitors just screaming all the time?"

"How the hell should I know?"

Cutsinger made an amused sound and said, "Perhaps I can contribute to this body of speculation. Let's say that for all ghosts all eternity is crammed into the same nanosecond. Or perhaps some kind of charge builds up and all those echoes of people and things keep coming back into existence and doing whatever they do. Living out lives just like the original people, doing the same things, thinking the same thoughts. Or perhaps the scenes replay themselves with minute or not-so-minute variations, but all variations on the same theme. And always the ghosts believe they *are* the real thing. Then they pass right out of existence again, until the charge builds up again. Repeat and repeat, world without end. A whole world created and extinguished in a nanosecond, and it makes just enough of a disturbance to register on that monitor."

"Just enough of one," said Summers, "to send a chill down my spine."

"I've come through the anomaly three times," the doctor said, "and gone back twice. Does that mean there are five electronic ghosts of me vying

for primacy in the same nanosecond of existence? Wouldn't their individual timelines get a bit tangled?"

"Timelines!" The physicist rolled his eyes. "I've wasted enough time over the years trying to explain why it isn't time travel."

Lane seemed not to take offense. "Very well, then. All of those alternate universes you're always going on about confuse the hell out of me. Imagine how confusing it must be for all of my ghosts."

The physicist smiled. "Actually, I can imagine it."

"Really now."

"Of course I can. If I'm able to imagine multiple worlds, a series of universes receding into infinity, I can certainly imagine ghosts. Doesn't mean I believe in them, though. Only that I can imagine them."

"I and this mystery," said Dr. Lane, "here we stand." He saw the expressions on the faces of the other three men and laughed good-naturedly. "Walt Whitman."

"It's getting metaphysical *and* poetical around here," Cullum said. "I may have to transfer to another shift."

Summers glanced at the clock. "Speaking of shifts, where's our relief?"

"I'll go ask."

Cullum went to the door adjoining the jump station, stuck his head through, and spoke to somebody. The physicist and the doctor drifted along in Summers' wake as he moved around the confines of the jump station taking readings and making minute adjustments.

All three men looked up sharply as the monitor beeped again. They were still regarding it thoughtfully, in silence, when Cullum returned and told Summers, "Charlie and Zeke are here."

The physicist started. "What?"

"What's the problem?"

The doctor blinked. "Nothing. Just—oh, nothing. Never mind."

"Come on," Cullum said to Summers, "let's go. I'm starved."

"Me, too."

They left Cutsinger and Dr. Lane with Charlie and Zeke and said nothing to each other until seated across from each other in the ship's mess. Then Summers looked up from his plate and said, "That physicist believed me. And that doctor—"

"That physicist was just rhapsodizing. And that doctor believes you're nuts. Probably he believes the physicist is nuts, too. Probably that's why he goes around with him. He's the physicist's doctor."

"You didn't see the look on his face when the same monitor beeped again."

"The monitor again. The monitor's *always* beeping for no reason."

"Nothing happens for no reason. But this is the first time that guy Cutsinger ever *thought* about it, I could tell."

Back in the jump station, Charlie and Zeke checked readings and made adjustments and paid no attention to Cutsinger and the Navy doctor, who seemed frozen rigid with expectation until one of the monitors beeped. Only then did they relax.

"Wish I could figure out what the hell that is," said Charlie.

"Beats me," said Zeke.

Dr. Lane nudged Cutsinger. "It cold in here to you? O

Elizabeth Bear is the 2005 John W. Campbell Award winner. Her most recent novel, *Dust* (Bantam Spectra), is the first in a series she describes as "Amber: Gormenghast, Upstairs: Downstairs. In space!" The author lives near Hartford with a presumptuous cat. Her New England heritage is apparent in this skilful evocation of . . .

# SHOGGOTHS IN BLOOM

Elizabeth Bear

"Well, now, Professor Harding," the fisherman says, as his *Bluebird* skips across Penobscot Bay, "I don't know about that. The jellies don't trouble with us, and we don't trouble with them."

He's not much older than forty, but wizened, his hands work-roughened and his face reminiscent of saddle-leather, in texture and in hue. Professor Harding's age, and Harding watches him with concealed interest as he works the *Bluebird's* engine. He might be a veteran of the Great War, as Harding is.

He doesn't mention it. It wouldn't establish camaraderie: they wouldn't have fought in the same units or watched their buddies die in the same trenches.

That's not the way it works, not with a Maine fisherman who would shake his head and not extend his hand to shake, and say, between pensive chaws on his tobacco, "Doctor Harding? Well, huh. I never met a colored professor before," and then shoot down all of Harding's attempts to open conversation about the near-riots provoked by a fantastical radio drama about an alien invasion of New Jersey less than a fortnight before.

Harding's own hands are folded tight under his armpits so the fisherman won't see them shaking. He's lucky to be here. Lucky anyone would take him out. Lucky to have his tenure-track position at Wilberforce, which he is risking right now.

The bay is as smooth as a mirror, the *Bluebird's* wake cutting it like a stroke of chalk across slate. In the peach-sorbet light of sunrise, a cluster of rocks glistens. The boulders themselves are black, bleak, sea-worn, and ragged. But over them, the light refracts through a translucent layer of

jelly, mounded six feet deep in places, glowing softly in the dawn. Rising above it, the stalks are evident as opaque silhouettes, each nodding under the weight of a fruiting body.

Harding catches his breath. It's beautiful. And deceptively still, for whatever the weather may be, beyond the calm of the bay, across the splintered gray Atlantic, farther than Harding—or anyone—can see, a storm is rising in Europe.

Harding's an educated man, well-read, and he's the grandson of Nathan Harding, the buffalo soldier. An African-born ex-slave who fought on both sides of the Civil War, when Grampa Harding was sent to serve in his master's place, he deserted, and lied, and stayed on with the Union army after.

Like his grandfather, Harding was a soldier. He's not a historian, but you don't have to be to see the signs of war.

"No contact at all?" he asks, readying his borrowed Leica camera.

"They clear out a few pots," the fisherman says, meaning lobster pots. "But they don't damage the pot. Just flow around it and digest the lobster inside. It's not convenient." He shrugs. It's not convenient, but it's not a threat either. These Yankees never say anything outright if they think you can puzzle it out from context.

"But you don't try to do something about the shoggoths?"

While adjusting the richness of the fuel mixture, the fisherman speaks without looking up. "What could we do to them? We can't hurt them. And lord knows, I wouldn't want to get one's ire up."

"Sounds like my department head," Harding says, leaning back against the gunwale, feeling like he's taking an enormous risk. But the fisherman just looks at him curiously, as if surprised the talking monkey has the ambition or the audacity to *joke*.

Or maybe Harding's just not funny. He sits in the bow with folded hands, and waits while the boat skips across the water.

The perfect sunrise strikes Harding as symbolic. It's taken him five years to get here—five years, or more like his entire life since the War. The sea-swept rocks of the remote Maine coast are habitat to a panoply of colorful creatures. It's an opportunity, a little-studied maritime ecosystem. This is in part due to difficulty of access and in part due to the perils inherent in close contact with its rarest and most spectacular denizen: *Oracupoda horibilis*, the common surf shoggoth.

Which, after the fashion of common names, is neither common nor prone to linger in the surf. In fact, *O. horibilis* is never seen above the water except in the late autumn. Such authors as mention them assume the shoggoths heave themselves on remote coastal rocks to bloom and breed.

Reproduction is a possibility, but Harding isn't certain it's the right answer. But whatever they are doing, in this state, they are torpid, unresponsive. As long as their integument is not ruptured, releasing the gelatinous digestive acid within, they may be approached in safety.

A mature specimen of *O. horibilis*, at some fifteen to twenty feet in diameter and an estimated weight in excess of eight tons, is the largest of modern shoggoths. However, the admittedly fragmentary fossil record suggests the prehistoric shoggoth was a much larger beast. Although only two fossilized casts of prehistoric shoggoth tracks have been recovered,

the oldest exemplar dates from the Precambrian period. The size of that single prehistoric specimen, of a species provisionally named *Oracupoda antediluvius*, suggests it was made by an animal more than triple the size of the modern *O. horibilis*.

And that spectacular living fossil, the jeweled or common surf shoggoth, is half again the size of the only other known species—the black Adriatic shoggoth, *O. dermadentata*, which is even rarer and more limited in its range.

"There," Harding says, pointing to an outcrop of rock. The shoggoth or shoggoths—it is impossible to tell, from this distance, if it's one large individual or several merged midsize ones—on the rocks ahead glisten like jelly confections. The fisherman hesitates, but with a long almost-silent sigh, he brings the *Bluebird* around. Harding leans forward, looking for any sign of intersection, the flat plane where two shoggoths might be pressed up against one another. It ought to look like the rainbowed border between conjoined soap bubbles.

Now that the sun is higher, and at their backs—along with the vast reach of the Atlantic—Harding can see the animal's colors. Its body is a deep sea green, reminiscent of hunks of broken glass as sold at aquarium stores. The tendrils and knobs and fruiting bodies covering its dorsal surface are indigo and violet. In the sunlight, they dazzle, but in the depths of the ocean the colors are perfect camouflage, tentacles waving like patches of algae and weed.

Unless you caught it moving, you'd never see the translucent, dappled monster before it engulfed you.

"Professor," the fisherman says. "Where do they come from?"

"I don't know," Harding answers. Salt spray itches in his close-cropped beard, but at least the beard keeps the sting of the wind off his cheeks. The leather jacket may not have been his best plan, but it too is warm. "That's what I'm here to find out."

Genus *Oracupoda* are unusual among animals of their size in several particulars. One is their lack of anything that could be described as a nervous system. The animal is as bereft of nerve nets, ganglia, axons, neurons, dendrites, and glial cells as an oak. This apparent contradiction—animals with even simplified nervous systems are either large and immobile or, if they are mobile, quite small, like a starfish—is not the only interesting thing about a shoggoth.

And it is that second thing that justifies Harding's visit. Because *Oracupoda*'s other, lesser-known peculiarity is apparent functional immortality. Like the Maine lobster to whose fisheries they return to breed, shoggoths do not die of old age. It's unlikely that they would leave fossils, with their gelatinous bodies, but Harding does find it fascinating that to the best of his knowledge, no one has ever seen a dead shoggoth.

The fisherman brings the *Bluebird* around close to the rocks, and anchors her. There's artistry in it, even on a glass-smooth sea. Harding stands, balancing on the gunwale, and grits his teeth. He's come too far to hesitate, afraid.

Ironically, he's not afraid of the tons of venomous protoplasm he'll be

standing next to. The shoggoths are quite safe in this state, dreaming their dreams—mating or otherwise.

As the image occurs to him, he berates himself for romanticism. The shoggoths are dormant. They don't have brains. It's silly to imagine them dreaming. And in any case, what he fears is the three feet of black-glass water he has to jump across, and the scramble up algae-slick rocks.

Wet rock glitters in between the strands of seaweed that coat the rocks in the intertidal zone. It's there that Harding must jump, for the shoggoth, in bloom, withdraws above the reach of the ocean. For the only phase of its life, it keeps its feet dry. And for the only time in its life, a man out of a diving helmet can get close to it.

Harding makes sure of his sample kit, his boots, his belt-knife. He gathers himself, glances over his shoulder at the fisherman—who offers a thumbs-up—and leaps from the *Bluebird*, aiming his wellies at the forsaken spit of land.

It seems a kind of perversity for the shoggoths to bloom in November. When all the Northern world is girding itself for deep cold, the animals heave themselves from the depths to soak in the last failing rays of the sun and send forth bright flowers more appropriate to May.

The North Atlantic is icy and treacherous at the end of the year, and any sensible man does not venture its wrath. What Harding is attempting isn't glamour work, the sort of thing that brings in grant money—not in its initial stages. But Harding suspects that the shoggoths may have pharmacological uses. There's no telling what useful compounds might be isolated from their gelatinous flesh.

And that way lies tenure, and security, and a research budget.

Just one long slippery leap away.

He lands, and catches, and though one boot skips on bladderwort he does not slide down the boulder into the sea. He clutches the rock, fingernails digging, clutching a handful of weeds. He does not fall.

He cranes his head back. It's low tide, and the shoggoth is some three feet above his head, its glistening rim reminding him of the calving edge of a glacier. It is as still as a glacier, too. If Harding didn't know better, he might think it inanimate.

Carefully, he spins in place, and gets his back to the rock. The *Bluebird* bobs softly in the cold morning. Only November 9th, and there has already been snow. It didn't stick, but it fell.

This is just an exploratory expedition, the first trip since he arrived in town. It took five days to find a fisherman who was willing to take him out; the locals are superstitious about the shoggoths. Sensible, Harding supposes, when they can envelop and digest a grown man. He wouldn't be in a hurry to dive into the middle of a Portuguese man o' war, either. At least the shoggoth he's sneaking up on doesn't have stingers.

"Don't take too long, Professor," the fisherman says. "I don't like the look of that sky."

It's clear, almost entirely, only stippled with light bands of cloud to the southwest. They catch the sunlight on their undersides just now, stained gold against a sky no longer indigo but not yet cerulean. If there's a word for the color between, other than *perfect*, Harding does not know it.



"Please throw me the rest of my equipment," Harding says, and the fisherman silently retrieves buckets and rope. It's easy enough to swing the buckets across the gap, and as Harding catches each one, he secures it. A few moments later, and he has all three.

He unties his geologist's hammer from the first bucket, secures the ends of the ropes to his belt, and laboriously ascends.

Harding sets out his glass tubes, his glass scoops, the cradles in which he plans to wash the collection tubes in sea water to ensure any acid is safely diluted before he brings them back to the *Bluebird*.

From here, he can see at least three shoggoths. The intersections of their watered-milk bodies reflect the light in rainbow bands. The colorful fruiting stalks nod some fifteen feet in the air, swaying in a freshening breeze.

From the greatest distance possible, Harding reaches out and prods the largest shoggoth with the flat top of his hammer. It does nothing in response. Not even a quiver.

He calls out to the fisherman. "Do they ever do anything when they're like that?"

"What kind of a fool would come poke one to find out?" the fisherman calls back, and Harding has to grant him that one. A Negro professor from a Negro college. That kind of a fool.

As he's crouched on the rocks, working fast—there's not just the fisherman's clouds to contend with, but the specter of the rising tide—he notices those glitters, again, among the seaweed.

He picks one up. A moment after touching it, he realizes that might not have been the best idea, but it doesn't burn his fingers. It's transparent, like glass, and smooth, like glass, and cool, like glass, and knobby. About the size of a hazelnut. A striking green, with opaque milk-white dabs at the tip of each bump.

He places it in a sample vial, which he seals and labels meticulously before pocketing. Using his tweezers, he repeats the process with an even dozen, trying to select a few of each size and color. They're sturdy—he can't avoid stepping on them but they don't break between the rocks and his wellies. Nevertheless, he pads each one but the first with cotton wool. *Spores?* he wonders. *Egg cases? Shedding?*

Ten minutes, fifteen.

"Professor," calls the fisherman, "I think you had better hurry!"

Harding turns. That freshening breeze is a wind at a good clip now, chilling his throat above the collar of his jacket, biting into his wrists between glove and cuff. The water between the rocks and the *Bluebird* chops erratically, facets capped in white, so he can almost imagine the scrape of the palette knife that must have made them.

The southwest sky is darkened by a palm-smear of muddy brown and alizarin crimson. His fingers numb in the falling temperatures.

"Professor!"

He knows. It comes to him that he misjudged the fisherman; Harding would have thought the other man would have abandoned him at the first sign of trouble. He wishes now that he remembered his name.

He scrambles down the boulders, lowering the buckets, swinging them

out until the fisherman can catch them and secure them aboard. The *Bluebird* can't come in close to the rocks in this chop. Harding is going to have to risk the cold water, and swim. He kicks off his wellies and zips down the aviator's jacket. He throws them across, and the fisherman catches. Then Harding points his toes, bends his knees—he'll have to jump hard, to get over the rocks.

The water closes over him, cold as a line of fire. It knocks the air from his lungs on impact, though he gritted his teeth in anticipation. Harding strokes furiously for the surface, the waves more savage than he had anticipated. He needs the momentum of his dive to keep from being swept back against the rocks.

He's not going to reach the boat.

The thrown cork vest strikes him. He gets an arm through, but can't pull it over his head. Sea water, acrid and icy, salt-stings his eyes, throat, and nose. He clings, because it's all he can do, but his fingers are already growing numb. There's a tug, a hard jerk, and the life preserver almost slides from his grip.

Then he's moving through the water, being towed, banged hard against the side of the *Bluebird*. The fisherman's hands close on his wrist and he's too numb to feel the burn of chafing skin. Harding kicks, scrabbles. Hips banged, shins bruised, he hauls himself and is himself hauled over the sideboard of the boat.

He's shivering under a wool navy blanket before he realizes that the fisherman has got it over him. There's coffee in a Thermos lid between his hands. Harding wonders, with what he distractedly recognizes as classic dissociative ideation, whether anyone in America will be able to buy German products soon. Someday, this fisherman's battered coffee keeper might be a collector's item.

They don't make it in before the rain comes.

The next day is meant to break clear and cold, today's rain only a passing herald of winter. Harding regrets the days lost to weather and recalcitrant fishermen, but at least he knows he has a ride tomorrow. Which means he can spend the afternoon in research, rather than hunting the docks, looking for a willing captain.

He jams his wet feet into his wellies and thanks the fisherman, then hikes back to his inn, the only inn in town that's open in November. Half an hour later, clean and dry and still shaken, he considers his options.

After the Great War, he lived for a while in Harlem—he remembers the riots and the music, and the sense of community. His mother is still there, growing gracious as a flower in a window-box. But he left that for college in Alabama, and he has not forgotten the experience of segregated restaurants, or the excuses he made for never leaving the campus.

He couldn't get out of the south fast enough. His Ph.D. work at Yale, the first school in America to have awarded a doctorate to a Negro, taught him two things other than natural history. One was that Booker T. Washington was right, and white men were afraid of a smart colored. The other was that W.E.B. DuBois was right, and sometimes people were scared of what was needful.

Whatever resentment he experienced from faculty or fellow students, in the North, he can walk into almost any bar and order any drink he wants. And right now, he wants a drink almost as badly as he does not care to be alone. He thinks he will have something hot and go to the library.

It's still raining as he crosses the street to the tavern. Shaking water droplets off his hat, he chooses a table near the back. Next to the kitchen door, but it's the only empty place and might be warm.

He must pass through the lunchtime crowd to get there, swaybacked wooden floorboards bowing underfoot. Despite the storm, the place is full, and in full argument. No one breaks conversation as he enters.

Harding cannot help but overhear.

"Jew bastards," says one. "We should do the same."

"No one asked you," says the next man, wearing a cap pulled low. "If there's gonna be a war, I hope we stay out of it."

That piques Harding's interest. The man has his elbow on a thrice-folded Boston *Herald*, and Harding steps close—but not too close. "Excuse me, sir. Are you finished with your paper?"

"What?" He turns, and for a moment Harding fears hostility, but his sun-lined face folds around a more generous expression. "Sure, boy," he says. "You can have it."

He pushes the paper across the bar with fingertips, and Harding receives it the same way. "Thank you," he says, but the Yankee has already turned back to his friend the anti-Semite.

Hands shaking, Harding claims the vacant table before he unfolds the paper. He holds the flimsy up to catch the light.

The headline is on the front page in the international section.

#### GERMANY SANCTIONS LYNCH LAW

"Oh, God," Harding says, and if the light in his corner weren't so bad he'd lay the tabloid down on the table as if it is filthy. He reads, the edge of the paper shaking, of ransacked shops and burned synagogues, of Jews rounded up by the thousands and taken to places no one seems able to name. He reads rumors of deportation. He reads of murders and beatings and broken glass.

As if his grandfather's hand rests on one shoulder and the defeated hand of the Kaiser on the other, he feels the stifling shadow of history, the press of incipient war.

"Oh, God," he repeats.

He lays the paper down.

"Are you ready to order?" Somehow the waitress has appeared at his elbow without his even noticing. "Scotch," he says, when he has been meaning to order a beer. "Make it a triple, please."

"Anything to eat?"

His stomach clenches. "No," he says. "I'm not hungry."

She leaves for the next table, where she calls a man in a cloth cap *sir*. Harding puts his damp fedora on the tabletop. The chair across from him scrapes out.

He looks up to meet the eyes of the fisherman. "May I sit, Professor Harding?"

"Of course." He holds out his hand, taking a risk. "Can I buy you a drink? Call me Paul."

"Burt," says the fisherman, and takes his hand before dropping into the chair. "I'll have what you're having."

Harding can't catch the waitress's eye, but the fisherman manages. He holds up two fingers; she nods and comes over.

"You still look a bit peaked," fisherman says, when she's delivered their order. "That'll put some color in your cheeks. Uh, I mean—"

Harding waves it off. He's suddenly more willing to make allowances. "It's not the swim," he says, and takes another risk. He pushes the newspaper across the table and waits for the fisherman's reaction.

"Oh, Christ, they're going to kill every one of them," Burt says, and spins the *Herald* away so he doesn't have to read the rest of it. "Why didn't they get out? Any fool could have seen it coming."

*And where would they run?* Harding could have asked. But it's not an answerable question, and from the look on Burt's face, he knows that as soon as it's out of his mouth. Instead, he quotes: "There has been no tragedy in modern times equal in its awful effects to the fight on the Jew in Germany. It is an attack on civilization, comparable only to such horrors as the Spanish Inquisition and the African slave trade."

Burt taps his fingers on the table. "Is that your opinion?"

"W.E.B. DuBois," Harding says. "About two years ago. He also said: 'There is a campaign of race prejudice carried on, openly, continuously and determinedly against all non-Nordic races, but specifically against the Jews, which surpasses in vindictive cruelty and public insult anything I have ever seen; and I have seen much.'"

"Isn't he that colored who hates white folks?" Burt asks.

Harding shakes his head. "No," he answers. "Not unless you consider it hating white folks that he also compared the treatment of Jews in Germany to Jim Crowism in the U.S."

"I don't hold with that," Burt says. "I mean, no offense, I wouldn't want you marrying my sister—"

"It's all right," Harding answers. "I wouldn't want you marrying mine either."

Finally.

## VISIT OUR WEBSITE

[www.asimovs.com](http://www.asimovs.com)

Don't miss out on our lively forum, stimulating chats, controversial and informative articles, and classic stories.

**Log on today!**

A joke that Burt laughs at.

And then he chokes to a halt and stares at his hands, wrapped around the glass. Harding doesn't complain when, with the side of his hand, he nudges the paper to the floor where it can be trampled.

And then Harding finds the courage to say, "Where would they run to? Nobody wants them. Borders are closed—"

"My grandfather's house was on the Underground Railroad. Did you know that?" Burt lowers his voice, a conspiratorial whisper. "He was from away, but don't tell anyone around here. I'd never hear the end of it."

"Away?"

"White River Junction," Burt stage-whispers, and Harding can't tell if that's mocking irony or deep personal shame. "Vermont."

They finish their scotch in silence. It burns all the way down, and they sit for a moment together before Harding excuses himself to go to the library.

"Wear your coat, Paul," Burt says. "It's still raining."

Unlike the tavern, the library is empty. Except for the librarian, who looks up nervously when Harding enters. Harding's head is spinning from the liquor, but at least he's warming up.

He drapes his coat over a steam radiator and heads for the 595 shelf: *science, invertebrates*. Most of the books here are already in his own library, but there's one—a Harvard professor's 1839 monograph on marine animals of the Northeast—that he has hopes for. According to the index, it references shoggoths (under the old name of submersible jellies) on pages 46, 78, and 133-137. In addition, there is a plate bound in between pages 120 and 121, which Harding means to save for last. But the first two mentions are in passing, and pages 133-138, inclusive, have been razored out so cleanly that Harding flips back and forth several times before he's sure they are gone.

He pauses there, knees tucked under and one elbow resting on a scarred blond desk. He drops his right hand from where it rests against his forehead. The book falls open naturally to the mutilation.

Whoever liberated the pages also cracked the binding.

Harding runs his thumb down the join and doesn't notice skin parting on the paper edge until he sees the blood. He snatches his hand back. Belatedly, the papercut stings.

"Oh," he says, and sticks his thumb in his mouth. Blood tastes like the ocean.

Half an hour later he's on the telephone long distance, trying to get and then keep a connection to Professor John Marshland, his colleague and mentor. Even in town, the only option is a party line, and though the operator is pleasant the connection still sounds as if he's shouting down a piece of string run between two tin cans. Through a tunnel.

"Gilman," Harding bellows, wincing, wondering what the operator thinks of all this. He spells it twice. "1839. *Deep-Sea and Intertidal Species of The North Atlantic*. The Yale library should have a copy!"

The answer is almost inaudible between hiss and crackle. In pieces, as if over glass breaking. As if from the bottom of the ocean.

It's a dark four PM in the easternmost U.S., and Harding can't help but recall that in Europe, night has already fallen.

"... infor ... need ... Doc ... Harding?"

Harding shouts the page numbers, cupping the checked-out library book in his bandaged hand. It's open to the plate; inexplicably, the thief left that. It's a hand-tinted John James Audubon engraving picturing a quiescent shoggoth, docile on a rock. Gulls wheel all around it. Audubon—the Creole child of a Frenchman, who scarcely escaped being drafted to serve in the Napoleonic Wars—has depicted the glassy translucence of the shoggoth with such perfection that the bent shadows of refracted wings can be seen right through it.

The cold front that came in behind the rain brought fog with it, and the entire harbor is blanketed by morning. Harding shows up at six AM anyway, hopeful, a Thermos in his hand—German or not, the hardware store still has some—and his sampling kit in a pack slung over his shoulder. Burt shakes his head by a piling. "Be socked in all day," he says regretfully. He won't take the *Bluebird* out in this, and Harding knows it's wisdom even as he frets under the delay. "Want to come have breakfast with me and Missus Clay?"

Clay. A good honest name for a good honest Yankee. "She won't mind?"

"She won't mind if I say it's all right," Burt says. "I told her she might should expect you."

So Harding seals his kit under a tarp in the *Bluebird*—he's already brought it this far—and with his coffee in one hand and the paper tucked under his elbow, follows Burt along the water. "Any news?" Burt asks, when they've walked a hundred yards.

Harding wonders if he doesn't take the paper. Or if he's just making conversation. "It's still going on in Germany."

"Damn," Burt says. He shakes his head, steel-grey hair sticking out under his cap in every direction. "Still, what are you gonna do, enlist?"

The twist of his lip as he looks at Harding makes them, after all, two old military men together. They're of an age, though Harding's indoor life makes him look younger. Harding shakes his head. "Even if Roosevelt was ever going to bring us into it, they'd never let me fight," he says, bitterly. That was the Great War, too; colored soldiers mostly worked supply, thank you. At least Nathan Harding got to shoot back.

"I always heard you fellows would prefer not to come to the front," Burt says, and Harding can't help it.

He bursts out laughing. "Who would?" he says, when he's bitten his lip and stopped snorting. "It doesn't mean we won't. Or can't."

Booker T. Washington was raised a slave, died young of overwork—the way Burt probably will, if Harding is any judge—and believed in imitating and appeasing white folks. But W.E.B. DuBois was born in the north and didn't believe that anything is solved by making one's self transparent, inoffensive, invisible.

Burt spits between his teeth, a long deliberate stream of tobacco. "Parlez-vous française?"

His accent is better than Harding would have guessed. Harding knows,



all of a sudden, where Burt spent his war. And Harding, surprising himself, pities him. "Un peu."

"Well, if you want to fight the Krauts so bad, you could join the Foreign Legion."

When Harding gets back to the hotel, full of apple pie and cheddar cheese and maple-smoked bacon, a yellow envelope waits in a cubby behind the desk.

WESTERN UNION

1938 NOV 10 AM 10 03

NA114 21 2 YA NEW HAVEN CONN 0945A  
DR PAUL HARDING=ISLAND HOUSE PASSAMAQUODDY MAINE=

COPY AT YALE LOST STOP MISKATONIC HAS ONE SPECIAL COLLECTION STOP MORE BY POST

MARSHLAND

When the pages arrive—by post, as promised, the following afternoon—Harding is out in the *Bluebird* with Burt. This expedition is more of a success, as he begins sampling in earnest, and finds himself pelted by more of the knobby transparent pellets.

Whatever they are, they fall from each fruiting body he harvests in showers. Even the insult of an amputation—delivered at a four-foot reach, with long-handled pruning shears—does not draw so much as a quiver from the shoggoth. The viscous fluid dripping from the wound hisses when it touches the blade of the shears, however, and Harding is careful not to get close to it.

What he notices is that when the nodules fall onto the originating shoggoth, they bounce from its integument. But on those occasions where they fall onto one of its neighbors, they stick to the tough transparent hide, and slowly settle within to hang in the animal's body like unlikely fruit in a gelatin salad.

So maybe it is a means of reproduction, of sharing genetic material, after all.

He returns to the Inn to find a fat envelope shoved into his cubby and eats sitting on his rented bed with a nightstand as a worktop so he can read over his plate. The information from Doctor Gilman's monograph has been reproduced onto seven yellow legal sheets in a meticulous hand; Marshland obviously recruited one of his graduate students to serve as copyist. By the postmark, the letter was mailed from Arkham, which explains the speed of its arrival. The student hadn't brought it back to New Haven.

Halfway down the page, Harding pushes his plate away and reaches, absently, into his jacket pocket. The vial with the first glass nodule rests there like a talisman, and he's startled to find it cool enough to the touch

that it feels slick, almost frozen. He starts and pulls it out. Except where his fingers and the cloth fibers have wiped it clean, the tube is moist and frosted. "What the hell. . . ?"

He flicks the cork out with his thumbnail and tips the rattling nodule onto his palm. It's cold, too, chill as an ice cube, and it doesn't warm to his touch.

Carefully, uncertainly, he sets it on the edge of the side table his papers and plate are propped on, and pokes it with a fingertip. There's only a faint tick as it rocks on its protrusions, clicking against waxed pine. He stares at it suspiciously for a moment, and picks up the yellow pages again.

The monograph is mostly nonsense. It was written twenty years before the publication of Darwin's *The Origin of Species*, and uncritically accepts the theories of Jesuit, soldier, and botanist Jean-Baptiste Lamarck. Which is to say, Gilman assumed that soft inheritance—the heritability of acquired or practiced traits—was a reality. But unlike every other article on shoggoths Harding has ever read, this passage *does* mention the nodules. And relates what it purports are several interesting old Indian legends about the "submersible jellies," including a creation tale that would have the shoggoths as their creator's first experiment in life, something from the elder days of the world.

Somehow, the green bead has found its way back into Harding's grip. He would expect it to warm as he rolls it between his fingers, but instead it grows colder. It's peculiar, he thinks, that the native peoples of the Northeast—the Passamaquoddys for whom the little seacoast town he's come to be named—should through sheer superstition come so close to the empirical truth. The shoggoths are a living fossil, something virtually unchanged except in scale since the early days of the world—

He stares at the careful black script on the paper unseeing, and reaches with his free hand for his coffee cup. It's gone tepid, a scum of butterfat coagulated on top, but he rinses his mouth with it and swallows anyway.

If a shoggoth is immortal, has no natural enemies, then how is it that they have not overrun every surface of the world? How is it that they are rare, that the oceans are not teeming with them, as in the famous parable illustrating what would occur if every spawn of every oyster survived?

There are distinct species of shoggoth. And distinct populations within those distinct species. And there is a fossil record that suggests that prehistoric species were different at least in scale, in the era of megafauna. But if nobody had ever seen a dead shoggoth, then nobody had ever seen an infant shoggoth either, leaving Harding with an inescapable question: if an animal does not reproduce, how can it evolve?

Harding, worrying at the glassy surface of the nodule, thinks he knows. It comes to him with a kind of nauseating, euphoric clarity, a trembling idea so pellucid he is almost moved to distrust it on those grounds alone. It's not a revelation on the same scale, of course, but he wonders if this is how Newton felt when he comprehended gravity, or Darwin when he stared at the beaks of finch after finch after finch.

It's not the shoggoth species that evolves. It's the individual shoggoths, each animal in itself.

"Don't get too excited, Paul," he tells himself, and picks up the remaining handwritten pages. There's not too much more to read, however—the rest of the subchapter consists chiefly of secondhand anecdotes and bits of legendry.

The one that Harding finds most amusing is a nursery rhyme, a child's counting poem littered with nonsense syllables. He recites it under his breath, thinking of the Itsy Bitsy Spider all the while:

*The wiggle giggle squiggle*

*Is left behind on shore.*

*The widdle giddle squiddle*

*Is caught outside the door.*

*Eyah, eyah. Fata gun eyah.*

*Eyah, eyah, the master comes no more.*

His fingers sting as if with electric shock; they jerk apart, the nodule clattering to his desk. When he looks at his fingertips, they are marked with small white spots of frostbite.

He pokes one with a pencil point and feels nothing. But the nodule itself is coated with frost now, fragile spiky feathers coalescing out of the humid sea air. They collapse in the heat of his breath, melting into beads of water almost indistinguishable from the knobby surface of the object itself.

He uses the cork to roll the nodule into the tube again, and corks it firmly before rising to brush his teeth and put his pajamas on. Unnerved beyond any reason or logic, before he turns the coverlet down he visits his suitcase compulsively. From a case in the very bottom of it, he retrieves a Colt 1911 automatic pistol, which he slides beneath his pillow as he fluffs it.

After a moment's consideration, he adds the no-longer-cold vial with the nodule, also.

*Slam.* Not a storm, no, not on this calm ocean, in this calm night, among the painted hulls of the fishing boats tied up snug to the pier. But something tremendous, surging towards Harding, as if he were pursued by a giant transparent bubble. The shining iridescent wall of it, catching rainbows just as it does in the Audubon image, is burned into his vision as if with silver nitrate. Is he dreaming? He must be dreaming; he was in his bed in his pinstriped blue cotton flannel pajamas only a moment ago, lying awake, rubbing the numb fingertips of his left hand together. Now, he ducks away from the rising monster and turns in futile panic.

He is not surprised when he does not make it.

The blow falls soft, as if someone had thrown a quilt around him. He thrashes though he knows it's hopeless, an atavistic response and involuntary.

His flesh should burn, dissolve. He should already be digesting in the monster's acid body. Instead, he feels coolness, buoyancy. No chance of light beyond reflexively closed lids. No sense of pressure, though he imagines he has been taken deep. He's as untouched within it as Burt's lobster pots.

He can only hold his breath *out* for so long. It's his own reflexes and weaknesses that will kill him.

In just a moment, now.

He surrenders, allows his lungs to fill.

And is surprised, for he always heard that drowning was painful. But there is pressure, and cold, and the breath he draws is effortful, for certain—

—but it does not hurt, not much, and he does not die.

*Command*, the shoggoth—what else could be speaking?—says in his ear, buzzing like the manifold voice of a hive.

Harding concentrates on breathing. On the chill pressure on his limbs, the overwhelming flavor of licorice. He knows they use cold packs to calm hysterics in insane asylums; he never thought the treatment anything but quackery. But the chilly pressure calms him now.

*Command*, the shoggoth says again.

Harding opens his eyes and sees as if through thousands. The shoggoths have no eyes, exactly, but their hide is *all* eyes; they see, somehow, in every direction at once. And he is seeing not only what his own vision reports, or that of this shoggoth, but that of shoggoths all around. The sessile and the active, the blooming and the dormant. *They are all one.*

His right hand pushes through resisting jelly. He's still in his pajamas, and with the logic of dreams the vial from under his pillow is clenched in his fist. Not the gun, unfortunately, though he's not at all certain what he would do with it if it were. The nodule shimmers now, with submarine witchlight, trickling through his fingers, limning the palm of his hand.

What he sees—through shoggoth eyes—is an incomprehensible tapestry. He pushes at it, as he pushes at the gelatin, trying to see only with his own eyes, to only see the glittering vial.

His vision within the thing's body offers unnatural clarity. The angle of refraction between the human eye and water causes blurring, and it should be even more so within the shoggoth. But the glass in his hand appears crisper.

*Command*, the shoggoth says, a third time.

"What are you?" Harding tries to say, through the fluid clogging his larynx.

He makes no discernable sound, but it doesn't seem to matter. The shoggoth shudders in time to the pulses of light in the nodule. *Created to serve*, it says. *Purposeless without you.*

And Harding thinks, *How can that be?*

As if his wondering were an order, the shoggoths tell.

Not in words, precisely, but in pictures, images—that textured jumbled tapestry. He sees, as if they flash through his own memory, the bulging radially symmetrical shapes of some prehistoric animal, like a squat tentacular barrel grafted to a pair of giant starfish. *Makers. Masters.*

The shoggoths were *engineered*. And their creators had not permitted them to *think*, except for at their bidding. The basest slave may be free inside his own mind—but not so the shoggoths. They had been laborers, construction equipment, shock troops. They had been dread weapons in their own selves, obedient chattel. Immortal, changing to suit the task of the moment.

This selfsame shoggoth, long before the reign of the dinosaurs, had built structures and struck down enemies that Harding did not even have

names for. But a coming of the ice had ended the civilization of the Masters, and left the shoggoths to retreat to the fathomless sea while warm-blooded mammals overran the earth. There, they were free to converse, to explore, to philosophize and build a culture. They only returned to the surface, vulnerable, to bloom.

It is not mating. It's *mutation*. As they rest, sunning themselves upon the rocks, they create themselves anew. Self-evolving, when they sit tranquil each year in the sun, exchanging information and control codes with their brothers.

*Free*, says the shoggoth mournfully. Like all its kind, it is immortal.

It remembers.

Harding's fingertips tingle. He remembers beaded ridges of hard black keloid across his grandfather's back, the shackle galls on his wrists. Harding locks his hand over the vial of light, as if that could stop the itching. It makes it worse.

Maybe the nodule is radioactive.

*Take me back*, Harding orders. And the shoggoth breaks the surface, cresting like a great rolling wave, water cutting back before it as if from the prow of a ship. Harding can make out the lights of Passamaquoddy Harbor. The chill sticky sensation of gelatin-soaked cloth sliding across his skin tells him he's not dreaming.

Had he come down through the streets of the town in the dark, bare-foot over frost, insensibly sleepwalking? Had the shoggoth called him?

*Put me ashore*.

The shoggoth is loathe to leave him. It clings caressingly, stickily. He feels its tenderness as it draws its colloid from his lungs, a horrible loving sensation.

The shoggoth discharges Harding gently onto the pier.

*Your command*, the shoggoth says, which makes Harding feel sicker still.

*I won't do this*. Harding moves to stuff the vial into his sodden pocket, and realizes that his pajamas are without pockets. The light spills from his hands; instead, he tucks the vial into his waistband and pulls the pajama top over it. His feet are numb; his teeth rattle so hard he's afraid they'll break. The sea wind knifes through him; the spray might be needles of shattered glass.

*Go on*, he tells the shoggoth, like shooing cattle. *Go on!*

It slides back into the ocean as if it never was.

Harding blinks, rubs his eyes to clear slime from the lashes. His results are astounding. His tenure assured. There has to be a way to use what he's learned without returning the shoggoths to bondage.

He tries to run back to the Inn, but by the time he reaches it, he's staggering. The porch door is locked; he doesn't want to pound on it and explain himself. But when he stumbles to the back, he finds that someone—probably himself, in whatever entranced state in which he left the place—fouled the latch with a slip of notebook paper. The door opens to a tug, and he climbs the back stair doubled over like a child or an animal, hands on the steps, toes so numb he has to watch where he puts them.

In his room again, he draws a hot bath and slides into it, hoping by the grace of God that he'll be spared pneumonia.

When the water has warmed him enough that his hands have stopped shaking, Harding reaches over the cast-iron edge of the tub to the slumped pile of his pajamas and fumbles free the vial. The nugget isn't glowing now.

He pulls the cork with his teeth; his hands are too clumsy. The nodule is no longer cold, but he still tips it out with care.

Harding thinks of himself, swallowed whole. He thinks of a shoggoth bigger than the *Bluebird*, bigger than Burt Clay's lobster boat *The Blue Heron*. He thinks of *die Unterseatboote*. He thinks of refugee flotillas and trench warfare and roiling soupy palls of mustard gas. Of Britain and France at war, and Roosevelt's neutrality.

He thinks of the perfect weapon.

The perfect slave.

When he rolls the nodule across his wet palm, ice rimes to its surface. *Command?* Obedient. Sounding pleased to serve.

Not even free in its own mind.

He rises from the bath, water rolling down his chest and thighs. The nodule won't crush under his boot; he will have to use the pliers from his collection kit. But first, he reaches out to the shoggoth.

At the last moment, he hesitates. Who is he, to condemn a world to war? To the chance of falling under the sway of empire? Who is he to salve his conscience on the backs of suffering shopkeepers and pharmacists and children and mothers and schoolteachers? Who is he to impose his own ideology over the ideology of the shoggoth?

Harding scrubs his tongue against the roof of his mouth, chasing the faint anise aftertaste of shoggoth. They're born slaves. They *want* to be told what to do.

He could win the war before it really started. He bites his lip. The taste of his own blood, flowing from cracked, chapped flesh, is as sweet as any fruit of the poison tree.

*I want you to learn to be free*, he tells the shoggoth. *And I want you to teach your brothers.*

The nodule crushes with a sound like powdering glass.

"Eyah, eyah. Fata gun eyah," Harding whispers. "Eyah, eyah, the master comes no more."

## WESTERN UNION

1938 NOV 12 AM 06 15

NA1906 21 2 YA PASSAMAQUODDY MAINE 0559A  
DR LESTER GREENE=WILBERFORCE OHIO=

EFFECTIVE IMMEDIATELY PLEASE ACCEPT RESIGNATION STOP  
ENROUTE INSTANTLY TO FRANCE TO ENLIST STOP PROFOUNDEST  
APOLOGIES STOP PLEASE FORWARD BELONGINGS TO MY MOTHER  
IN NY ENDIT

HARDING O



One of Ian Creasey's four 2006 *Asimov's* publications, "Silence in Florence" (September), was chosen for the *Year's Best SF 12* anthology (edited by David G. Hartwell and Kathryn Cramer). His 2007 appearances included stories in Jim Baen's *Universe* and *Weird Tales*. Ian's material has also been podcast at *Pseudopod* and *The Great Beyond*. Readers can learn more about his work at [www.iancreasey.com](http://www.iancreasey.com). We're glad that the author is making a 2008 *Asimov's* appearance with a poignant tale that explains why . . .

# THIS IS HOW IT FEELS

Ian Creasey

As Nathan hurried to pack his son's lunchbox—sandwiches, fizzy drink, an apple included more in hope than expectation—he fought back pangs of sorrow for the other lunchbox, the Flower Fairies box he'd never pack again. *Forget Jenny*, he told himself. *She was never my daughter.*

He watched Christopher fussing over breakfast, scooping individual Coco Pops from the bowl and crushing them on his tongue until his teeth looked like brown stumps. "Eat up, lad, or we'll be late."

"But I'm waiting for the milk to go chocolatey!" said Christopher, with the timeless priorities of an eight-year-old boy.

Nathan glanced at the clock. "Well then, while you're waiting for that, why don't you put your things in the car?"

Christopher scampered upstairs and began clattering around in his room. Nathan checked that his own briefcase held everything he needed—client reports, product updates, background reading for any unlikely spare moments. Then he packed up his laptop, on which he'd been completing last-minute work before breakfast.

On his way to the front door, Nathan dodged aside as his son threw a half-empty backpack over the banister, down into the hall. He bit back the instinctive rebuke. Christopher ran downstairs until he reached the fourth step from the bottom, then jumped the rest of the way.

Nathan's eyes stung as he remembered how Jenny used to do just that: the same jump down the stairs, the same windmilling of her arms as she

landed. . . . The grief swept over him like a palpable wave, making him stagger backward.

"Dad?" Christopher kicked his backpack down the hall to the door. "You all right?"

"It's nothing," said Nathan. He rubbed the implant-port behind his right ear. *It's nothing. It's not real.*

But it *felt* real.

"Have you got everything?" he asked. "I thought you had football this afternoon."

"Oh yeah!" Christopher's grin shone with enthusiasm. "I'll get my kit."

Knowing that, if left to himself, Christopher would spend far too long choosing which of his replica shirts to wear—he had five Manchester City players, plus assorted England stars past and present—Nathan said, "I'll get it. You finish your breakfast."

He loped upstairs to forage for shirt, shorts, socks, and boots. All the while, he was conscious of the clock ticking out the moments of the morning. He had to get his son to school, but beyond that lay the client meeting at half past ten—in Oswestry, normally a routine drive away. But driving wasn't routine any more.

Downstairs, Christopher had finished his cereal, in the process spreading chocolate stains across a surprisingly wide area. Nathan sighed at yet another delay. "Go wash your face and brush your teeth."

At last they headed outside, greeted by garden sparrows sounding rather more cheerful than the bleak drizzle warranted. "We'll be late," Christopher said happily, as he climbed into the silver dual-fuel BMW.

Nathan's wife usually drove Christopher to school, but whenever Yvonne went on tour, Nathan took over—cramming yet another task into a crowded day. He sometimes thought about employing an au pair, but he was already too close to becoming the kind of father who only saw his children at weekends.

As they approached St. Mary's Primary, the streets grew more congested; the road full of cars and clanking scooters, the pavements full of children in ugly maroon blazers. Parental umbrellas projected holograms of consultancy logos. A sweet yeasty smell hung in the air, the legacy of older vehicles not optimized for bioethanol.

Nathan's stomach filled with dread. All the girls on either side of the road reminded him painfully of lost Jenny. She'd died coming home from school, run over by a speeding car. . . .

Somewhere in the fog of grief, a distant horn blasted out.

"Dad? I think they're honking at you."

The BMW had slowed to a crawl as Nathan subconsciously reacted to the memories. In the rear-view mirror, he saw a Volvo driver frowning at him. The horn blared again.

"I'll drop you off here," said Nathan.

The boy gathered his bags and slid out of the car. "Are you coming to watch me play football?"

"Sorry, busy day today. I'll pick you up afterward and you can tell me all about it."

With a disappointed trudge, Christopher joined the throng of children.

Nathan drove off down a side street, and concentrated on navigating through the speed-bumps and silly little mini-roundabouts the council had installed. He couldn't dispel the images from his mind: Jenny blowing out the candles on her birthday cake; Jenny in the hospital, in the mortuary, laid out in her child-size coffin. . . .

He pulled into a parking space, then took a deep breath and a gulp of water. *It's not real*, he told himself. *It's not my daughter*. But it didn't help. Nathan felt as if he'd dropped his brain on the kitchen floor, then tried to pick up the bits and reassemble his mind—but too many pieces had rolled under the fridge, so that his skull ended up stuffed with crud and fluff and other people's spillages.

Sitting inside the car made him feel sick. He walked to a nearby bench, where he booted up his laptop and downloaded the usual blizzard of emails. Nathan worked in the pensions industry, which was constantly in flux as the Government struggled to persuade people to save more for their ever-lengthening old age. The emails contained links to regulations, explanations, and valuations, along with various questions and draft reports from his office AI. Nathan ploughed through his inbox, dispatching succinct haphazardly spelled replies.

He noticed the time and shook his head. As ever, he'd spent a little too long doing email. His client load had swelled when PDMH offloaded consultants in a cost-cutting drive; foreseeing the layoffs, he'd previously volunteered to take on extra territory. But it put him constantly on the back foot, scurrying everywhere at the last minute.

Nathan returned to his car and put the radio on loud in an effort to drown out the thoughts—*Jenny with compost in her hair as she planted tomato and cucumber seeds; Jenny dashing to the greenhouse every morning to see if they'd sprouted*—that the implant pumped into him. Even when he reached the main road, he found it hard to drive over thirty miles per hour. Cars kept honking, and overtaking with disdainful revs of their engines.

He listened to the sports round-up, focusing on the rescheduled Grand Prix race—he had a spread-bet on Ferrari for the Formula 1 constructors' championship. The news update followed. "It's ten o'clock on Wednesday the nineteenth of January, and here with the latest headlines—"

January 19th: *Jenny's birthday*. Memories of all her past birthdays slid into Nathan's brain in a montage of cakes and presents and singing and parties. She would have been seven this year. But there'd be no more birthdays, no more anything. Just a silent house—the room left untouched, the dust slowly settling on her clothes, her dolls, her colorful scribbles blu-tacked to the wall.

*This is how it feels: an empty garden where everything once green is now grey; a frozen pond with ice all the way down; a compost heap where rats endlessly gnaw at the rotting scraps of your heart. . . .*

Nathan braked, narrowly missing a cyclist as he pulled over and stopped the car. He began to cry, then angrily wiped his eyes. Jenny wasn't his daughter. Christopher didn't have a sister. But the transplanted emotion felt as real—*more* real—than his own memory.

It affected his driving. As, indeed, it was intended to. He'd known its purpose, but with brash confidence he'd thought he would soon get used

to the implant, soon master it. Instead, it had mastered him. Today was the worst it had ever been.

Looking at the dashboard dial showing the miles left to drive, Nathan knew he couldn't reach Oswestry in time for the meeting. He'd have to phone Alan Selden, the secretary to the trustees, and apologize. Nathan pounded the steering wheel in frustration. He could claim his car had broken down, was stuck in traffic, whatever—but he didn't want to lie. Besides, Alan was a bluff Welshman who responded better to an honest admission of cock-up than to flimsy excuses. Nathan remembered the trustees' fund manager explaining why he'd underperformed the benchmark: "We made a pig's ear of it! We picked the wrong sectors and it all went south when the recession hit." The trustees had warmed to the manager's openness, and instead of sacking him had given him a deadline to turn performance around.

Nathan called his client. "Sorry—I'm stuck outside Manchester and I can't get to the meeting."

"What's the problem?" said Alan brusquely.

"I've got an implant that's doing my head in. I was clocked three times on speed cameras and I had a choice between losing my license, or having an implant. It's from some guy whose daughter was run over by a speeding motorist. Twelve-month sentence. I thought I could live with it, but it's really messing me up. It doesn't matter what road I'm on, I just can't go over thirty. I keep getting these visions of—" Nathan stopped, conscious that he was gabbling.

"Sorry to hear it. Those implants can be tough—my brother-in-law got one for drunk driving, and now he can barely have half a shandy down the pub. Still, if you can't drive fast, you could have set off earlier."

"Had to get the young lad to school. My wife's on tour—playing Glasgow tonight."

"Then you should have made other arrangements. We're running a business, not a daycare center. And the FD's been saying we should tender the contract, that pensions just keep sucking money out of the company and we need to plug the leak."

Nathan swallowed hard, suppressing his resentment at the implied insult to his consultancy.

Alan went on, "We'll postpone your bit until we've looked at the corporate restructuring. I'll send you the minutes after the meeting."

"Okay—let me know when you want to reschedule. And again, I'm sorry about this." Nathan hung up, then tried to slow his breathing with one of the calming exercises from his wife's meditation manual.

Alan's attitude ticked him off, yet he couldn't blame the man. And this wasn't the first client appointment he'd had trouble reaching. The other day, he'd only just squeezed into the Liverpool conference, after everyone else had already finished coffee-and-hello.

This couldn't go on. He couldn't keep trying to shrug off the implant's effects as he might shrug off the flu. His mind had no immune system, no memetic antibodies to neutralize the foreign sentiments dripping into his brain.

Yet what could he do? If he went back to court, they might allow the al-

ternative sentence of losing his driving license. But he needed to drive: that was why he'd originally accepted the implant. His clients were scattered across the map like pimples on the arse-end of nowhere—shabby coastal resorts; industrial estates in decayed conurbations; abandoned farms converted into rural micro-businesses.

He had to keep his license. His job depended on driving, and his family depended on his job; Yvonne barely earned enough to cover her touring costs. So, the implant would have to be dealt with.

There was a black market in implant-inhibitors: antidotes, overwrites, open-source hypno-hacks too new to even be illegal. Nathan knew he could find a backstreet chopshop and pay a tattooed modgod to open up his brain and tinker with it. They'd leave the external feed intact, to pass the monthly probation check-ups, but the internal input could be rerouted, transformed with dream illogic into something less intrusive.

Yes, the chopshops could bypass an implant—if you trusted them. The official justice-chips were bad enough; the Conspiracy Channel claimed they had subperceptual phasing effects to make people pollute less, recycle more, Vote LabDem, turn into zombies when someone in a secret bunker pressed a big red button. But the under the counter stuff . . . who knew what was in it? The modgods could tag anything to the implant override—malware memes, subtle cravings for certain products or behaviors—and you wouldn't even notice until the end of the month when your bank balance ran out and you wondered why you'd donated all your money to obscure offshore charities.

An illegal shunt might do anything. Nathan wasn't that desperate, not yet. Still, if he started losing clients, he'd risk PDMH marking him down for the next cull. Soon he might have no choice.

He needed another answer. He needed some way to nullify the chip's impact. Until now, he'd been trying to escape the dripfeed of false feeling, trying to run away inside his head. But that couldn't work—like a child scared of going to school, he would never master the problem until he faced its source.

Nathan had to confront the implant and expose its unreality. When he could experience the artificial emotion and truly *know* that it wasn't real, then the illusion of grief would lose its power. He needed to see the underlying truth, to make the falsehood wither away.

The truth began with a dead girl: Jenny . . . something. Jenny who? Nathan turned on his laptop and delved through the disclosures and waivers relating to the judicial implant. A name surfaced: Pigalle. It echoed faintly in his mind. He searched online cemetery records for the name Jenny Pigalle. Nothing. He tried again, looking for Jennifer Pigalle.

Lawnswood Cemetery in Leeds had a Jennifer Pigalle, and the dates looked right. Six years. *Only six years, seven months. She would never grow up, never choose what subjects to study or sports to play, never agonize over which job to take, which boy to date.* . . . Furiously, Nathan put his hands over his eyes, pressing his eyeballs so hard that the tears came from pain rather than grief.

He set off for Leeds, a jaunt across the Pennines on the M62. The journey would interrupt his afternoon schedule of conference calls and the ever-

urgent paperwork. But if necessary he'd postpone some of that, until it became tomorrow's last-minute rush. After all, what would life be like without a mad dash to meetings and deadlines? He sometimes felt that if he didn't wake up with six urgent things to do before breakfast, he wouldn't know what to do—he'd just lie in bed until his cellphone prodded him into life.

Two hours of slow driving later, Nathan pulled up outside Lawnswood Cemetery. The website gave him a tagged map of the plots. Not wanting to carry the laptop with him, he glanced at the map, then locked all his gear in the back of the car.

Flanking the cemetery gates, carved gryphons gazed at him impassively, their stone the same dull grey as the drizzle-soaked sky. As he paced along the graveled paths, Nathan saw dates and epitaphs on lichen-splotched tombs. With professional interest, he noted the mortality stats of prior decades: the cohorts of workers who'd died in middle age, barely drawing any pension. There was once a time when the Queen sent a congratulatory telegram to anyone who reached their hundredth birthday; now she was a centenarian herself, with poor Charles still the eternal heir to the throne in his eighties.

The cemetery lacked visitors, save for someone walking their dog around the perimeter. A biting breeze blew dead leaves across the graves. Nathan hunched his shoulders and huddled into himself; he'd worn a smart suit anticipating an indoor meeting, not a wet and windy graveyard. In the distance, beyond the ivy-choked fence, he heard the jackhammer beat of dance music.

He entered a new wing of the cemetery, where the headstones had crisp edges and uneroded inscriptions. Wreaths lay askew, battered by the wind. Electric candles shone with brittle sparks of memory. Occasionally a motion-activated hologram would spring up from a grave, offering recorded greetings and AI-simulated conversation, like a ghost eager to hear the day's news from the corporeal world; then, as Nathan moved out of range, the holograms would fade back down into the earth as if they had failed an audition to return to life.

At a bend in the path he looked around, unsure of his location relative to the map, but relishing the uncertainty as proof that he didn't belong here, that he had no connection to this place. He scanned the nearby graves, and saw a white headstone with incised black script.

JENNIFER VIVIAN PIGALLE

Born 19 January 2026

Died 25 August 2032

*Beloved daughter of Lawrence and Martha*

*A heaven-sent flower plucked too soon*

In Nathan's mind, a torrent of emotion poured forth, a kaleidoscope of remembered games and cuddles and tantrums and let's pretend. He didn't try to push it back, but let the grief wash over him, all the while thinking, *This isn't mine. I have never been here before.*

As he stepped toward the grave, a small hologram appeared—a young girl with long fair hair, dressed in white and carrying a toy koala, her lips smudged with ice cream. Nathan recognized her from his implant-haunted dreams, and his heart stuttered.



She frowned. "Who are you? You're not my daddy!"

"No. I'm not your father." Nathan spoke with emphasis, trying to etch the words into his brain.

"Are you digging our garden? I want rhodo—, rho—, rhodo-dodo-dodo-dendrons!" She spoke in sing-song, tapping her foot in midair at each "rhodo" and "dodo."

"I'm sorry. I'm not digging your garden." In the implant's memories, his daughter lay sprawled on the lawn while he recited all the flowers for her, all the daisies and pansies and roses, and he made up silly names for the blooms he didn't know, so that she giggled at "angel's slippers" and "fairy feathers" and "true love waits by the cabbages."

*That wasn't my garden. This isn't my daughter. She doesn't even look like me, or like Yvonne.* The cognitive dissonance dazed him, but he embraced it like Orwell's Winston Smith accepting that two plus two made five. Only by confronting it could he overcome it.

Jenny wailed, with a thin synthetic howl. "Go away, you bad man!"

Reflexively, Nathan stepped back. The hologram vanished. His false emotion remained, squatting inside his head like a sluggish toad. Nathan knew that the grief overlay wouldn't disappear—it couldn't disappear, because the implant kept feeding it in. But he could force it to hibernate in its own little nest, and stop swamping his brain.

Nathan stared at the gravestone. The emotion in his mind felt as artificial as the taste of cheap strawberry-flavored sweets. As it became more distinct from his genuine feelings, it became a little easier to . . . not ignore, but disregard. He felt that this expedition had definitely helped. He'd seized a shard of reality that he could cling onto whenever the implant's unreal sentiments threatened to overwhelm him.

"Who the fuck are you?" said a harsh voice to his left.

Nathan jumped at the interruption, then turned and saw a man with shaggy blond hair, wearing a long black raincoat and muddy shoes. He carried a jam-jar full of yellow chrysanthemums.

"You must be the father," Nathan realized. Instinctively he rubbed the shiny spot behind his ear, before regaining control of his hand and stuffing it in his pocket.

The man's gaze followed the gesture. "You have an implant?" His gaunt face looked as raw and ragged as a half-finished taxidermist's specimen. "Is that *my* implant? Are you one of those speeders who got sentenced with it?"

Nathan nodded. "Yes. I'm sorry to disturb you—"

"So you should be! What the hell are you doing here on my daughter's birthday? Are you one of those Conspiracy Channel fuckheads? You think it's all fake?" He stepped forward and pointed at the grave. "What do you want me to do, dig up Jenny's coffin and show you the bones?"

As he moved within range, the hologram appeared. "Daddy! You brought me flowers!" Jenny smiled as if it were summer, as if they were all about to go on a long-awaited holiday together.

"Yes, sweetie. But I see you've had a visitor. Did he introduce himself? This is the man who killed you!"

"I did not!" exclaimed an outraged Nathan.

"You could have," said Pigalle in his low, cracked voice. "You're just the

same as the guy who did kill her. Speeding along without a care in the world . . . how bloody hard is it to keep to the limit?"

Exasperated, Nathan shook his head. "I never drive fast near schools. I have a little boy myself! I only got clocked by cameras on my way to client meetings."

"And where are these oh-so-important meetings of yours? On the moon? In another universe where there aren't any kids?"

The hologram girl looked from one man to the other with frightened eyes. She raised the toy koala to her face and stroked its fur against her cheek.

Nathan stared at Pigalle and said, "I'm sorry for your loss—believe me, I know how you feel. But I refuse to feel guilty for something I didn't do."

"You know how I feel?" Pigalle glanced toward Nathan's right ear, then shook his head. "What's your sentence: six months, twelve? For me, it's a lifetime! Don't spin me that bullshit—"

A jaunty tune rang out from Nathan's jacket pocket. Automatically, he reached inside and grabbed his phone.

"You're taking phone calls on my daughter's grave?" Pigalle raised his arm as if about to lash out.

Nathan began to reply, then perceived that nothing he could say would mollify the man. He knew too well what awful emptiness lay behind the hollow voice, the lank mask of a face. "I'll take it somewhere else. Sorry to trouble you." The words sounded so inadequate, he felt they might turn into dust as soon as they left his mouth.

He hurried away. As he strode down the cemetery's gravel path—each tiny stone a black petrified tear of sorrow—he answered the phone. It was a client, of course, a client wanting action on something or other. Nathan scrawled rain-soaked notes for a task that would percolate up from the bottom of his To Do list until it became another last-minute rush job. The cellphone pumped out urgency, demanding attention like another version of the implant, as if Nathan were just a mobile motherboard for the devices driving him.

When the client rang off, Nathan couldn't help glancing back toward the graveside. He saw Pigalle slumped over the headstone, his form so gaunt and still as to resemble an empty raincoat that some tramp might gratefully steal. The jam-jar lay on its side, yellow flowers spilling onto the grass. A translucent girl stood beside her father, trying to hug him and hold him, but her arms just kept slipping through.

Then the motion-sensor timed out, and the hologram vanished.

Nathan wiped his eyes, without trying to suppress the tears. He walked back to his car, grateful to escape the pounding rain. Turning up the heater, he let the dampness gently steam out of his suit.

*This is how it feels: the whole world a graveyard, everywhere you walk treading on your daughter's bones. . . .*

He checked his watch, remembering that he had a conference call scheduled for three o'clock. His calendar pinged reminders for last-minute prep before tomorrow's meetings. And he needed to pick up Christopher after football.

Nathan drove away, cautiously easing onto the Leeds ring road. As always, the implant pumped pictures and feelings into his mind: *Jenny car-*

rying a frog in a bucket, her arms smeared with green pondweed. Now the images segued into his memory of the holographic girl, and the futile scrabbling of her ghostly arms.

*It's not real*, said Nathan to himself, reciting the stale old mantra. But he knew that for someone else, it *was* real. He realized that the implant projected so many vivid memories because Pigalle had spent so much time with his daughter.

The car crept along at thirty miles per hour. As he pressed harder on the accelerator, he remembered the way Jenny's phantom foot had tapped in midair. The muscles in his leg clenched and spasmed. Behind him, a Renault honked. The driver gestured insultingly as he jinked and zoomed past Nathan's BMW.

*Here we go again*, thought Nathan. He was tempted to visit a chopshop and get the implant rooted out, regardless of side-effects. But even without the implant, he would still remember the hologram girl and her toy koala, her father's face hollowed out with sorrow.

As he pulled over to think, his phone beeped a reminder alarm. Nathan shook his head. If he didn't have so much work to do, so many last-minute jobs, he wouldn't need to drive so fast.

He'd been hoarding clients to forestall being downsized. But it would do neither him nor PDMH any good if he lost his license, or fried his brains in a backstreet chopshop. He needed to slow down, not just in his car but in his life.

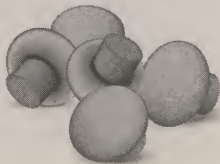
Nathan cancelled the upcoming conference call and turned off his phone. Then he sedately piloted his way back into the traffic and headed west, pottering along behind a slow-moving truck.

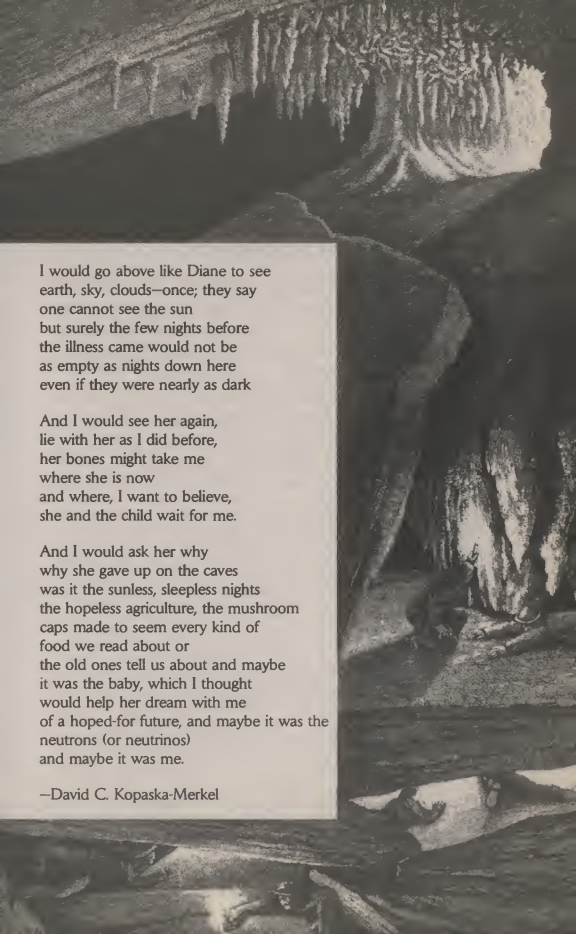
With no more interruptions, perhaps he would even arrive back early enough to watch Christopher play football. After all, Nathan didn't know how much time together they might have left. The final whistle could blow tomorrow.

*This is how it changes: here, now.* ○

## MUSHROOM AGRICULTURE

We work in caverns  
where scientists used to seek neutrons  
or was it neutrinos? A mockery of farming  
farmer tans are impossible  
tractors would not fit, silos  
a joke; we might as well be in  
a dank dark silo our whole lives,  
such as they are;  
and I hate mushrooms.





I would go above like Diane to see  
earth, sky, clouds—once; they say  
one cannot see the sun  
but surely the few nights before  
the illness came would not be  
as empty as nights down here  
even if they were nearly as dark

And I would see her again,  
lie with her as I did before,  
her bones might take me  
where she is now  
and where, I want to believe,  
she and the child wait for me.

And I would ask her why  
why she gave up on the caves  
was it the sunless, sleepless nights  
the hopeless agriculture, the mushroom  
caps made to seem every kind of  
food we read about or  
the old ones tell us about and maybe  
it was the baby, which I thought  
would help her dream with me  
of a hoped-for future, and maybe it was the  
neutrons (or neutrinos)  
and maybe it was me.

—David C. Kopaska-Merkel

# SEPOY FIDELITIES

Tom Purdom

Tom Purdom reports that his “grandson is a creative writing student at Philadelphia’s highly regarded High School for the Creative and Performing Arts and serves on the tech team that maintains the school’s computers and website. His younger sister writes scripts for a *Buffy* podcast, reads physics books, and makes arcane jokes about her secret Theory of Everything. Science and fiction is obviously a hereditary combination.” Tom’s new story about human and alien interactions is set in the same milieu as his December 1992 novelette, “Sepoy.”

**I**t had been the last time they would ever make love—and in their case making love was a precise use of language, not a euphemism. Francesca had rolled on her side when Jason had finally broken the bond and he had wrapped himself around her with his arm stretched along the swell of her hip and the long line of her thigh. The heft of her vibrant, competent body was, in its way, just as satisfying as everything that had gone before.

*I was a real mouse when I was a girl, Francesca had told him when they had been sharing their memories of the people they had been. I couldn't hit a ball. Boys thought I looked dull. Nothing changed when I got older. So one day I let myself spend a little time poking around the tucfra recruiting site. And ended up running around in this.*

Jason had found it harder to tell the truth about himself. He still felt like a fraud—like his body was just a façade and the real Jason Jardanell was still a helpless dependent whose muscles had been almost completely useless since they had been devastated by the slackbody virus just after his sixth birthday. He had picked up Francesca once, and tossed her on the bed, just for the sheer joy of knowing he controlled two functioning, professionally developed arms.

“Would you like to play something?” Francesca murmured. “One more time? We’ve still got a few minutes.”

"Is that what you want?"

"If it's all right with you. This is nice but—"

"Then let's do it. It might make Byron and the Colonel feel better if they happened to hear any of it. They could tell themselves we've been in here making music."

Francesca giggled. She rolled out of bed and he watched her walk across the bedroom to her dressing room. Her husband had outfitted his mansion with one of the pleasanter luxuries of the rich—a mammoth bedroom with oversized dressing rooms on each side. Each dressing room contained its own bathroom, enormous walk-in closets, a full wall entertainment screen, and all the furniture and appliances a well-heeled husband or wife needed when they wanted to lounge in privacy just a few steps from the conjugal bed.

Michael Gratzhausen had been a shy child, according to Francesca, and he had compensated by working out with personal trainers. Jason eyed the image in his dressing screen every time he passed by the camera and saw himself wrapped in the duplicate of Michael's body the tucfra had given him. He succumbed to the temptation twice this time, once while he was still naked, but he was nagged by the same emotions that had pecked at the moments he had just shared with Francesca. What would the tucfra do with him when this assignment ended? Would he ever walk around in anything this splendid again? Or love a woman as magnificent as Francesca?

They were both wearing businesslike turtlenecks and slacks when they emerged from the dressing rooms. Jason picked up a cello and Francesca sat down at the bedroom fortepiano—the lightly strung early version of the piano that Mozart and Haydn had actually had in mind when they composed.

"Can we give the Shui romance another try?" Jason said. It was a twenty-first century composition, but Tang Shui had written it for the gentler sound of the older instruments. Francesca had never played it before he had encouraged her to run through it with him.

"Whatever you want."

Jason picked up the bow and drew it along the strings of the cello with Michael's knowledgeable, experienced hands. He spent a minute with his ear to the strings, making his final meticulous adjustments to the tuning. Then he nodded at Francesca and started to ride the long, slow arc of the opening cello part.

"You have a call from Dr. Mineaux," the house said. "Priority minus one."

Francesca stopped playing in mid phrase. "*Le métier tristesse de le regimiente Dillon.*"

The system responded to the password they had been given for the day and placed the image of a dapper, bearded man on the bedroom screen.

"I take it you're both primed for the evening's adventure," the man said.

"We'll be leaving at twenty-two hundred," Francesca said. "As scheduled."

She had turned away from the piano and placed her palms on her knees, as if she needed to brace herself. She always seemed to lose some



of her poise when she talked to the de facto rulers of Earth—even when they clothed themselves in the bodies of amiable sophisticates.

“Our intelligence indicates there’s only two people in the boathouse, as promised—Dr. Levar and Captain Kelly McMay. We still think you should be prepared for a trap, but it looks like they’ll be the only adversaries you’ll have to worry about. We’ll continue to observe the boathouse until the handover is finished, of course.”

Francesca nodded. They had both decided it was best to say as little as possible when you were talking to the tucfra. You didn’t take chances when you were dealing with people who could choose your next body.

“I’m afraid my superiors are becoming a touch tiresome,” the tucfra officer said. “They’ve asked me to reemphasize our relationship with Dr. Levar. If this does turn out to be a trap—if Dr. Levar fails to keep her end of the bargain—then I think it’s obvious we will no longer be bound by our own pledges.”

The tucfra’s face hardened. “We will accept her capture. Her death would be preferable.”

“I understand,” Francesca said.

“Of course, you’re also supposed to factor in our assessment of Dr. Levar’s mental state. We don’t *know* she’ll kill Michael—and perhaps herself—if she feels cornered, but you will have to assume it’s a possibility. I realize that leaves you with some conflict in your instructions but you can at least take comfort in the fact that my overseers have confidence in your judgment.”

The officer smiled. “Enjoy your evening.”

The screen darkened. Francesca lowered her head and rattled off half a dozen piano notes with her left hand.

“At least he didn’t remind us we’re dispensable,” Jason said.

Their last briefing had laid out their priorities with less ambiguous precision. Michael Gratzhausen’s survival was, of course, the uncontested no-questions-asked winner of the number one slot on the list. Michael had to be rescued *alive* and *in good health*. Michael was the indispensable component in the tucfra’s plans. He had the kind of personality traits a good ruler should have, in the opinion of their employers. He had been endowed with traits that couldn’t be artificially instilled in a human personality without disrupting equally desirable traits such as ordinary human unpredictability.

As for Jason and Francesca—the mission planners had decided Jason should be awarded the second position and Francesca the third. If anything happened, Jason had been informed, he was supposed to ignore the impulses common among males of his species in his cultural sector. He must refrain, no matter how he felt, from any attempt to protect Francesca if that attempt might endanger him. It would take the tucfra twenty-six days to replace him with another version of Michael, the planning officer had explained—long enough the opposition could exploit Michael’s unexplained absence and create serious difficulties. Francesca’s death would be an inconvenience, but she could always be replaced with a second wife who would provide Michael and his children with the same kind of guidance Francesca had provided.

But that was only a consideration, it seemed, if Jason had to choose between his survival and Francesca's. If he encountered a Michael-Jason choice, then he would, of course, understand that his own demise was the preferable, if regrettable, option. Jason could only replace Michael for a limited time, even if he was inhabiting an exact duplicate of Michael's body. Michael's closer acquaintances were already beginning to notice the "changes" in his personality. Jason had a splendid future as a valued agent of the Tucfra Hegemony, but he wasn't the kind of person who could cope with the long term, sometimes tedious, details of government.

Francesca shrugged. "It looks like it's time we returned to the world, Lieutenant."

"At your service, Major."

The boat was a coast patrol catamaran—a platform crowded with weapons and crew stations that had been laid across two sleek high-speed hulls. Jason and Francesca had pulled wet suits over their clothes and settled into lounge chairs in the officers' ready room. Byron Trainee and Colonel Wolsner were standing near the starboard windows watching the lights of the casinos and pleasure malls that glittered along the shore.

Byron Trainee was wearing the armored dress jacket he usually wore when he was on duty, but he was carrying a bigger sidearm and he had stored the weapon in a bulky shoulder holster he wore outside the jacket. His waist belt held two stubby laser "swords" that had been tucked into gleaming leather sheaths. He looked, as usual, as if he was trying to repress a smile. Byron was a slender, good-natured young man who still acted as if he thought skirmishes and raids were slightly more dangerous versions of the amusement park rides he liked to frequent during his leisure hours.

Jason's own pistol was a large, flat item that had been crammed into a sealed storage pocket on the chest of his wet suit. His laser sword and three sets of spare batteries rested in a smaller pocket.

Francesca smiled. "I hope you won't be *too* disappointed if this all goes off without a hitch, Byron."

Byron turned around and smiled back. He had been placed in command of the special operations squad sitting in the enlisted ready room. It was the first time he had been given command of a combat unit. He had been Michael and Francesca's personal bodyguard for most of the four years he had been a commissioned officer.

"At this point in our adventures," Byron said, "I think a quiet and uneventful boat ride will give me all the entertainment I need."

Colonel Wolsner was carrying his standard-issue Jersey Guard pistol on the standard-issue cross belt rig that came with his standard-issue Jersey Guard duty uniform. He had been one of Francesca's supporters ever since she had made her first appearance in the Commonwealth of Sovereign Jersey and captured Michael's heart. He had believed her influence over Michael was one of the best things that had ever happened to the Gratzhausen family, but his attitude had changed as soon as she had revealed she was a tucfra agent.

*I knew he thought the tucfra are just a bunch of racketeers, Francesca had said. But I didn't expect the contempt I keep picking up. Byron still seems to think I'm the same glamorous figure he's been protecting ever since he got his commission. The Colonel makes me feel like he can look right through my skin and see the real me hiding inside.*

Jason had been surrounded all his life by people who expressed their hatred for the tucfra—and their contempt for *seeps*—as casually as they talked about the weather. Francesca had been born in Florida, to parents who had served the Tucfra Hegemony and retired on comfortable pensions. Jason had grown up in the New England Confederation, under a government that maintained its independence with a fanatic disregard for every other consideration. As a child, he had thought the term *seep* referred to the way tucfra agents oozed through human society like some kind of toxic waste. He had been a teenager when he had discovered it was a corruption of *sepoy*—the name the British had conferred on the native soldiers who had manned the army that held India for the British Empire. There were, as far as anyone could tell, only about two thousand tucfra living in the sealed habitat they had constructed in the Sahara. That handful of aliens—who seemed to be a wandering band of adventurers—had taken control of an entire planet by working through human agents and human institutions, in the same way a few thousand British imperialists had once ruled the teeming millions who inhabited the Indian subcontinent. The tucfra ship had orbited Earth just as the conflicts created by global warming were approaching a peak. Its envoys had descended from the sky in disarmingly human bodies and started peddling technological abatements and recruiting employees. The peace called the Tucfra Hegemony had settled on the Earth before its inhabitants quite understood what had happened. The United Nations had acquired a powerful military force. Major nations had fragmented into harmless political divisions such as the Cooperation of Gandung and the Commonwealth of Sovereign Jersey.

"You could get yourself a new body and volunteer to take the lady's place," Colonel Wolsner said. "Don't your friends in the Sahara keep a few good bodies hanging on racks for overnight use, Mrs. Gratzhausen?"

Francesca maintained her smile. "That's one of the rumors you hear, Colonel."

"You didn't manage to confirm it during your own stay with them?"

Francesca raised her arm off the chair and glanced at the time strip on the back of her glove. Colonel Wolsner didn't know it, but he was triggering an inhibition that always made Jason feel momentarily confused when it blocked his own responses. The tucfra body transfer technology was one of the subjects their human agents couldn't talk about—were psychologically *incapable* of talking about.

"Michael Gratzhausen is our first priority," Francesca said. "We've been told that twice when we got our orders. We're going to get him out for you, colonel. He would be my first priority in any case. But there are no conflicts between my personal desires and the orders we've been given."

"And you will continue your role as Michael's wife."

"If Michael wants me to. It will be up to him. He's a good man—a good

husband, a good father, and a good political leader. You know that as well as I do."

"I also know the tucfra have partitioned a great nation into seventeen impotent little pseudo-countries. And commandeered 15 percent of an entire planet's economic output just to support the lifestyle they maintain in their desert paradise."

Francesca settled back in her chair. A hint of a drawl colored her voice—a sure sign she was deliberately maintaining a composed, unprovocative façade. "This isn't the time to get involved in an argument about the rights and wrongs of the Tucfra Hegemony. We're going to bring Michael out. We're going to restore him to his rightful position. You want that. *I* want that. Ninety percent of the people who live under Michael's government would want it, if they knew what we're doing."

Byron nodded. A thin smile slipped across his face. It occurred to Jason that everyone in the room understood who was in charge of this expedition.

They slipped into the water two miles off shore. It was a long swim, even for people with their bodies, but Francesca had decided it was necessary. Pleasure boats usually stayed within a mile of the shore, and Francesca felt they had to minimize the danger that a boat full of late night revelers might spot their cruiser and wonder why a patrol catamaran had taken up a parking position at such an odd hour.

The waves were only a foot high. Jason could see the stars when he happened to look up, but overall the swim was about as interesting as a long series of laps in a darkened indoor pool. It didn't matter. He had Francesca beside him and he was doing something he couldn't have dreamed of doing just a year ago.

He had taken his first swim two days after the tucfra had given him the body he had inhabited during his training. His trainer, Sergeant Shardi, led him through a two mile run and finished the session with a plunge into the shallow end of an outdoor pool. Jason had never taken a swimming lesson, but he thrashed across the width of the pool with his best imitation of the swimmers he had seen on TV. Sergeant Shardi let him relax after he finished the second lap and he spent ten minutes hopping around in the water like a schoolboy. He actually did a couple of cannonball dives off the rim of the pool, holding his knees against his chest and raising a splash that would have made him the envy of the kids he had once watched from his wheelchair.

*As far as I'm concerned, Francesca had said, I'm Michael's wife. They gave me the job and I've done it. The information in your briefing was correct—I have become quite fond of him. He may not be the best man for the job he's inherited, but he's a kind, decent man who loves music and pleasure. I'd rather see him running things than a lot of people who may be tougher and more ruthless and all the other things our wonderful Director of Security thinks Michael should be. I've been here for thirteen years and I've done a good job. I wouldn't have done it half as well if I didn't like Michael. And didn't like being married to him.*

The wonderful Director of Security was Michael's stepbrother, Freder-

ick Gratzhausen. According to the original plan set up by the tucfra (or the human bureaucrats who did their planning), Jason had been dispatched to Sovereign Jersey so he could replace Michael for a few weeks and counter a coup Frederick had been developing. Michael would be kept in a safe house until the danger passed and return to his rounds thinking he had spent the time in a pleasant rehab facility while Francesca looked after things at home.

Instead, Jason had arrived at the handover point—a secluded twelve-room weekend “cottage”—and discovered Colonel Wolsner and Lieutenant Traine slumped across an oversized dining room table sleeping off the effects of one of the stealthier contemporary drugs. Frederick had deposited his stepbrother in his own version of a safe house and Jason and Francesca had spent two months maneuvering against Frederick’s underlings while Michael lay in a hospital bed, attached to a tube that could deliver a dose of one of the faster contemporary poisons anytime Eileen Levar opened the right valve.

A guard shark approached them as they entered the artificial lagoon outside the boathouse. The shark was only about six feet long, but it looked like it was half teeth when it rolled onto its back three feet under their bellies.

Francesca broke radio silence. “Can we assume our charming friend Kelly McMay is operating the shark?”

Jason smiled. “It does look like his kind of smile, doesn’t it?”

The boathouse had been upgraded during the period when Michael Gratzhausen’s grandfather had been establishing his control over the area that had become the Commonwealth of Sovereign Jersey. The boat door was a massive sliding affair that looked as if it could stop any weapon a well-equipped smash-and-grab raiding party would have in its arsenal. The structure above the door was a windowless wall spotted with hatches that obviously concealed gun emplacements.

They had already decided Byron Traine’s team couldn’t blast through the door if they had to launch an assault. Byron’s force would have to land on the beach and pick its way through the automated defenses that protected the beach house from an attack from the land—a process that could take a full quarter hour under the best circumstances, and longer if their adversaries had added a few extra gimmicks to the arrangements depicted in the family databanks.

The door slid open. The shark flashed them another look at its teeth and disappeared into the blackness of the water.

The gap in the doorway was about three feet wide. Francesca stroked ahead of him and Jason let her take the lead. He slipped below the surface just as Francesca’s hands dug into the water on the other side of the door. He might have to let her go into danger first, but nobody had told him he had to stay ten strokes behind.

The door rumbled shut. Jason shot to the surface and they lifted their face masks and treaded water back to back.

The docking pool was a big floodlighted rectangle with walkways on three sides. A pleasure boat loomed above them on their left—a sixty-footer, according to the knowledge Jason had acquired when the tucfra had

prepared him for life among the elite. Two racy-looking motorboats bobbed on their right. In front of them, about two Olympic laps from their position, two figures were standing in the center of the rear walkway. One of them matched the simulations of Eileen Levar the tucfra had shown them. The other, as promised, was Michael Gratzhausen.

Eileen had two tortoiseshell guardcats sitting in front of her. She was wearing a close-fitting brown beret and a loose lab coat that could have draped over most of the bulges a weapon could produce.

Jason frowned at the man standing on her left. Michael looked as if his captors had been stuffing him with drugs. His shoulders were slumping forward. The face drooping between the shoulders looked slack and listless. Jason was examining the same handsome face and the same broad-shouldered physique he had been admiring in his dressing screen, but he wasn't seeing the verve that had flooded through him from the moment his brain had connected with Michael's glands and muscles.

Francesca's back stiffened. "That's not Michael."

She pulled away from him with the clean, silent strokes he had watched her use when she launched into a sprint during her morning laps.

"It's the copy. *They've brought us the copy.* Stroke for the bow of the first motorboat. We'll climb out there."

Three splashes hit the water. A gray barrier rose out of the deck in front of Eileen. She dropped to one knee and Jason realized she was holding a weapon.

It was a confusing moment. Jason had been prepared for a trap that included aquatic guard animals and he had stopped worrying about that possibility when it had become clear the docking pool was empty. Guard cats were non-aquatic. He had assumed the cats might attack when he and Francesca climbed onto the walkway. He had already started thinking about the best way to cover Francesca when they reached the edge of the pool.

The third splash added to the confusion. They knew Eileen Levar had been developing a copy of Michael. She was an expert in tucfra body transfer technology. The tucfra wanted her neutralized precisely because she was a renegade who had the details of their most powerful technology stored in her head. But a body needed a brain . . . a fully stocked, properly trained brain . . . the product of eight months of work, the tucfra claimed, even with the advanced techniques Eileen Levar had mastered. . . .

The cats were plowing toward them like a pair of torpedoes. If Eileen Levar could make a copy of Michael, she could obviously transform a pair of guard cats into an aquatic death squad.

Francesca's gun snapped. "Protect yourself," Francesca said. "They're after you. I'll take care of Eileen. You're the one she's aiming for."

Jason's hands were already reaching for the pocket that held the laser sword. He left the pocket sealed and plunged under the surface.

A huge surge flowed through his body. Two long strokes of his arms pulled him three yards below the surface. He was outnumbered three to one but he had the body the tucfra had given him—a body that had capabilities even Michael couldn't imitate.



Francesca was radioing the patrol boat and receiving a broken-up reply that consisted mostly of Byron Trainee complaining he was receiving a broken-up message. She rattled out a report anyway, starting with terse sentences that let Jason know she was firing at Eileen and using one of the speed boats for cover.

The light from the boathouse lighting system lit the water with a green glow. The cats stayed on the surface as he slipped toward them from below and he saw them as featureless silhouettes. Their paws were churning the water like motorized paddles.

As a boy, lying in bed with useless muscles, Jason had usually watched the action series that featured female adventurers. He had shied away from male action heroes because they made him feel he was watching someone he might have been—or at least someone a nine-year-old boy could *believe* he might have been. The big exception to his preference for female protagonists had been a mass of muscle who had roamed around Stone Age Africa strangling lions and killing zebras with his bare hands. Konga's feats had been so absurd, even to a nine-year old mind, that Jason had known there wasn't the slightest possibility he could have done such things himself if he had been granted a normal life.

It hadn't occurred to him that he might someday inhabit a body that had been touched up here and there by an alien species that had been remodeling its own bodies for a couple of thousand terrestrial years. In the New England Confederacy, he would have been committing treason if he had expressed a yearning for a *normal* body crafted by the alien despots.

The cats altered their course, one left and one right, and slipped beneath the surface. They were still dark, featureless shapes from Jason's viewpoint but their bodies seemed to elongate. Their hindquarters were wiggling like the sterns of seals.

He pulled his legs underneath him and shot toward the surface with his body upright. Rigid fingers stabbed into the belly of the cat on the left. Feline stomach muscles yielded before the pressure of a bone and muscle spear. He couldn't puncture the cat's skin, but he could crush its soft organs between his fingers and its spine.

His left hand jumped to the animal's right rear leg. His fingers clamped around its ankle. The hand that had just stunned it with pain and internal damage grabbed the leg higher up and applied a twist. Tendons tore. Bones snapped out of joints. Jason bobbed to the surface and sucked in a lungful of air.

The second cat popped up beside him. Claws raked across his legs. A forepaw reached for his head.

He blocked the paw with his left arm and kicked away from the cat. He flipped over backward, spine arched, and started a loop that would, if all went well, end with another upward drive.

The cat came down after him. They met face to face as he was pulling out of his dive and he decided Konga might have had the right idea after all.

It took a little fainting and twisting but he ended up just where he wanted to be, sprawled over the cat's back with his left arm wrapped around its body and his right hand pressing against the bottom of its jaw.

The strongest muscleman the human race had produced would be making a huge mistake if he tried to strangle a lion on the open plains. But a human with a tucfra-enhanced body could probably hold a smaller carnivore under water until it drowned.

The cat struggled underneath him. It rolled onto its back—a maneuver that might have done some damage if it had been squeezing him between its weight and solid ground—and he held his body pressed against its spine.

Motion jerked his attention to his left. A big shape loomed out of the underwater murk. Eileen Levar's Michael-puppet reached for him with clumsy sweeps of its arms.

It would have been a laughable opponent if he hadn't been clinging to the cat. The human at the other end of the connection was obviously transmitting direct orders to the double's limbs. She couldn't give its unformed brain a general order like *attack* or *kill* and let it handle the details.

Jason, on the other hand, was trying to defend himself against her maneuvers while he was holding onto a writhing, death-dealing mass that seemed to be taking an exorbitantly long time to drown.

The puppet's arms closed around his ankles. It held itself against him in the same way he was holding onto the cat and he realized the three of them were dropping away from the light.

Francesca was still transmitting a play by play. The barrier in front of Eileen was armored and it seemed to be opaque on Francesca's side and transparent on Eileen's. Eileen could pop up behind it at any point with her weapon trained. Francesca's hopped-up reflexes gave her an edge but so far it seemed to be a standoff. Francesca was firing over the top of the barrier, in the hope she could keep Eileen down, and Eileen was jumping up at random and snapping off hurried shots before Francesca could shoot back.

"I'm forcing her to concentrate on me, Jason. But that's the best I can do."

Francesca could switch to an armor-piercing charge. The Jersey Guard had opted for a controlled-velocity, separate-propellant system for its police weapons. They could set their guns at a low-velocity stun or a high-velocity lethal setting and the gun would calculate the range and inject liquid propellant into the combustion chamber as required. The maximum setting would drive a bullet through most of the armor manufactured on the planet. But each increase in force required a bigger squirt of propellant. Francesca's gun would burn up most of the propellant in its fuel tank if she set it at maximum. And there was no guarantee the bullet would penetrate the barrier anywhere near Eileen.

For Jason, at that moment, Eileen Levar's gun was rapidly becoming a remote consideration. The immediate issue was a decision that was becoming more pressing every second. Should he assume he would still have some oxygen left in his lungs when the cat died? Or should he turn his attention to the thing that was dragging him toward the floor of the docking pool?

He let go of the cat and yielded to an uncontrollable impulse. His hands

snapped into position in front of his face, palms outward, and he cowered behind them with his head lowered. The cat made a half turn and did what he had hoped it would do. It decided the air at the surface was more appealing than a few slashes at the impertinent biped who was trying to kill it.

The puppet was holding Jason's legs in a bear hug, with its face pressed against the backs of his calves. Jason had to engage in an exercise in contortionism, but he managed to reach behind him and place his left hand behind the thing's neck while he cupped its chin with his right. Choking wouldn't do the job. He didn't have time. Neither would a thumb in the eye or some other attempt to inflict pain. The puppet might feel the pain, but the woman controlling its actions was comfortably isolated from the responses hammering through its nervous system.

The puppet's grip loosened seconds after Jason snapped its neck. He fought his way free and rose toward the light as if he was ascending into a particularly attractive version of the afterlife.

His brain felt as if it was getting ready to explode but it still responded to the precepts his combat trainers had tattooed on its circuits. He swiveled his head right and left as he broke the surface and saw the cat eyeing him across six feet of low waves. The crack of a gun seemed like a distant, half-understood background noise.

The cat threw back its head. Its mouth dropped open. It thrashed at the air as if it was slapping at an insect and settled into the water.

"Get under water," Francesca ordered. "Get behind the yacht."

Jason plunged beneath the surface. He had to repress every impulse his nerves and glands seemed to be telegraphing. His lungs were still half empty. But he knew he had to move before Eileen Levar fired at him. He was lucky she hadn't locked her sights on him while Francesca was shooting at the cat.

He came up near the bow of the big pleasure boat and yielded to the luxury of sucking in three deep breaths in succession. Their communications net was obviously hopping from frequency to frequency as it dueled with a jamming system. At the moment it seemed to be winning. Byron and his assault team were racing toward the beach. Francesca was telling Byron he should land but he shouldn't attack.

"Don't trigger the defense system," Francesca said. "We haven't seen Kelly. We have to assume he's standing by Michael and she's willing to have him turn the valve. If she's crazy enough to try this, she's crazy enough to try anything."

"We'll beach in about one minute," Byron said.

"Stay open. Don't move unless you know exactly what the situation is. Have you caught your breath yet, Lieutenant?"

"I'm active," Jason said.

"Stay covered. Be prepared to fire when I give the word."

Francesca was already hauling herself onto the walk on the other side of the pool. She actually looked noticeably awkward for one brief moment—an event that was so rare it surprised Jason every time it happened. Then she flowed to her feet and ran, gun in hand, toward the barrier.

Jason had been removing his own gun from its sealed pocket as he watched her. She was obviously counting on her enhancements, in the same way he had assumed he could tackle the cats with his bare hands.

He thumbed the on switch and a green light advised him the gun was functioning. His left hand clutched the prow of the pleasure boat.

"Select full automatic L3," Francesca said. "Lay down covering fire."

Jason shoved two selectors into place. He locked his left hand around his right wrist and sprayed the air over the barrier, right to left, with the gun aimed high. L3 was a low velocity, sublethal load that would keep ricochets to a minimum. Most of the bullets would flatten against the back wall and fall straight down.

Eileen popped up on the right end of the barrier just as he was hammering the other end of his arc. He swung the gun back with his finger glued to the firing button and held it on target until he had exhausted the last drop of propellant in his fuel tank.

The communication system relayed a gasp from Francesca. Jason jerked his head to the right and saw her stumble to the concrete two steps from the barrier.

Eileen was leaning against the barrier staring at the water. A dark stain smeared the front of her lab coat. She wiggled her neck as if she was trying to shake something off and slid behind the barrier.

Jason shoved his gun into its pocket. He hauled himself out of the water and sprinted down the walk.

"Francesca! Can you hear me? Can you still hear?"

Jason had trained with military combat suits that were equipped with state-of-the-art automated first aid systems. The wet suits they had chosen for this operation were standard civilian issue gear, but they housed functions that were supposed to protect you against possibilities like shark attacks or serious cuts. The suit couldn't broadcast a condition report or stiffen around a broken bone, but it could seal a hole and reduce the hemorrhaging from an open wound.

None of the shots he had fired could have ricocheted. The bullet that had brought her down could only have come from one source—the gun Eileen Levar had been firing at full lethal load since she had first started shooting at them.

The door in the rear wall swung open. A young man in a Jersey Guard uniform stepped through it with his palms raised in front of his chest.

"I think a parley might be in order," Kelly McMay said. "We seem to have reached an impasse."

Jason lurched to a stop. Kelly McMay carried himself with a smiling self-confidence that always seemed infinitely more threatening than the mass and muscle displayed by the kind of body Jason inhabited. He was wearing the same dress jacket Byron Traine had sported, but he had discarded the shoulder holster and the weapon belt.

"From what I can see from here," Kelly said, "Mrs. Gratzhausen appears to be in no immediate danger. I can also give you my assurance your twin is still alive. Dr. Levar invited me to carry out her little threat before she succumbed to her wounds but I felt a delay might benefit both of us."

"Kill him," Francesca said. "... now."

Jason's head snapped toward the other side of the pool. Francesca's pronunciation was almost incomprehensible but he had heard all he needed. She was alive. She could hear them talking.

She obviously didn't understand the situation. Kelly had left the door open behind him. He could slip through it long before Jason could pull out his gun and replace the fuel tank. Even with his enhanced physical abilities, Jason would have to move several steps closer before he could rush the barrier and stop Kelly's escape unarmed.

"Think about it, body double. I still have your alter ego in my dastardly clutches. Is there any reason why you and I can't arrange things so you remain in your present position indefinitely? Wealth. Power. A ravishing consort."

Jason held up his own hands to show they were empty and took a quarter step forward. "With some kind of reward for you, I suppose?"

"I'm offering you an incredibly desirable package. Didn't your masters give you any training in the art of haggling with the less idealistic members of the opposition? It's a vital skill."

Jason's first encounter with Kelly McMay had taken place minutes after he arrived at the Gratzhausen weekend retreat and discovered Michael had disappeared and Byron Traine and Colonel Wolsner were lost in a drugged stupor. Michael's stepbrother had been the instigator of the plot to kidnap Michael but Kelly was the desperado Fredrick Gratzhausen called on when his intrigues turned violent.

The big moment that first time had been a leap from a second story window. A mobile security camera had seen the tall stranger enter the cottage and Kelly and three of his confederates had raced back to the grounds while Jason was waiting for Francesca to respond to his Mayday call. They had cornered Jason in an upstairs recreation room and he had arced across thirty feet of open air, grabbed the lower branch of a tree, and hit the ground with a perfect knees-bent landing before he sprinted for the helicopter hovering over the tennis court. And his first meeting with the woman manipulating the controls.

The second episode had been an ambush on the open sea—a surprise nighttime rush from a speedboat with Kelly leading a reckless attempt to capture Jason before Byron Traine and the crew of the Gratzhausens' second largest party boat could organize a defense. There had been no wonderful moments that time. The battle had degenerated into a confused nighttime skulk and shoot amid the furniture and fittings on the upper deck. Jason had been content to force the boarders to withdraw, but Francesca had been taut with anger when she had realized Kelly's boat was turning into the night with only one casualty belted into its seats. To Jason, Kelly was the kind of athletic, high-testosterone swaggerer he might have been if the virus had left him alone—an accomplished high diver, an aggressive speedboat racer, and a ballroom gallant who could be just as charming, in his way, as Byron Traine. Francesca had been watching Kelly ever since he had joined the Jersey Guard and she considered him a self-centered, unpredictable cynic with no values or loyalties anyone could count on.

Jason shook his head. "It's an interesting idea, Captain. But I'm afraid my *masters* could be a difficult obstacle. They have rigid feelings about people who break their oaths."

"You don't think they would be just as happy with their own slightly revised edition occupying the Gratzhausen mansion?"

"They want the real Michael. They feel he has virtues I seem to lack."

"Suppose we kept Michael alive? As a kind of permanent hostage? How would they react to that? Wouldn't they bargain with you the way they bargained with Dr. Levar?"

"Kill . . . him . . . that's . . . an . . . order . . ."

Kelly had seen Jason in action, but he seemed to be underestimating Jason's ability to cover distance and clear an obstacle like the barrier. Jason had managed to close the gap by two more half-steps.

"They might be willing to strike a deal," Jason said. "But they wouldn't stop looking for a way to rescue Michael. I couldn't face a single day without wondering if I was going to live to see the end of it."

"But wouldn't it be worth it to spend more time with Mrs. Gratzhausen? Am I supposed to believe you don't feel a prize like that is worth any risk?"

"She's the first person who would turn against me."

"You're sure of that, body double? You don't think your manly charms have lured her from the path of virtue?"

Jason turned his head toward Francesca. And hoped the gesture would draw attention from another forward movement. One more half-step should get him close enough. . . .

Kelly McMay's right hand leaped toward his left cuff. He swung his arm to his right, in a short, deadly arc, and Jason dropped to his hands and knees. The air over his back cracked.

The object in Kelly's hand had been a laser sword—a weapon with an effective range of approximately eleven feet. Kelly hadn't been misjudging Jason's abilities. He had been holding off until he was certain Jason had entered his killing zone.

Jason ripped open the pocket that contained his own sword. There would be a five-second lag while Kelly's weapon recharged. He couldn't draw his gun and reload it in that interval, but he could jerk out his sword and bring it into play.

The term "laser sword" was an obvious misnomer, but it had appealed to the customer base and the original manufacturers had indulged their market's romantic fantasies. You obviously couldn't fence with the thing, in the sense of using it to parry your opponent's attacks. The only resemblance to real fencing was the tendency to use big sweeping arm movements, like the slash of a saber, or the kind of small, precise wrist movements foil fencers mastered. Other than that, "fencing" with low-powered practice weapons was a picturesque sport that encouraged energetic jumps and split-second dodges.

The sword was essentially a short range self-defense weapon. Its power unit could only deliver six pulses, with a five-second buildup between pulses. An assailant could always evade an attack by backing up—provided, of course, he had room to retreat.

A quick leap backward would have given Jason time to position himself



for an attack. Instead, he jumped forward while his hands were still removing his sword from its pocket.

Kelly McMay stood his ground. He brought his arm down and to the right, like a conductor starting a symphony, and Jason's augmented reflexes responded with a sideways leap that raised him off the ground just before Kelly's second pulse swept across the space his ankles had occupied.

Jason brought his own arm up as his soles hit the floor. He glided through another step with his arm extended in front of him.

Kelly had shifted to a crouch. He was focusing on his opponent with the intensity of a soccer goalie preparing for a penalty kick. Jason's thumb pushed the firing switch and Kelly dropped toward the floor behind the barrier.

Kelly had timed his move like a world class athlete. The beam sliced through empty space. And Jason was holding, once again, a tube that couldn't do anything useful for another five seconds.

Jason had reveled in the hours he had devoted to practice bouts with non-lethal lasers. He had leaped, rolled, and ducked with the abandon of a boy who had suddenly been given the opportunity to live out all his swashbuckling fantasies.

But that had been a game. He could engage in high-risk maneuvers knowing he would merely set off a buzzer and sacrifice a point if his opponent outfoxed him. Now he couldn't forget he was facing a weapon that could maim and kill. The energy concentrated in that narrow beam could pierce his wet suit like a knife point and sever tendons and muscles. It could mangle his internal organs as effectively as a small caliber, high velocity bullet.

Kelly, on the other hand, could hide behind the shelter of an armored uniform jacket. The only targets Jason could harm were Kelly's face, hands, and lower legs.

He might have leaped over the barrier if this had been a game. He might have gambled he could get in a pulse before Kelly could recover and fire. Instead, he dropped into his own version of a goalie's crouch and waited for Kelly's next move.

Kelly stood up a good three steps out of range. Small, dark goggles covered his eyes. Jason had been concentrating on the door, but Kelly had scurried along behind the barrier toward the other side of the boathouse. Toward Francesca—and the gun lying on the concrete next to her right hand.

"Michael is on the other side of the door," Kelly said. "Run down the hall, smash a few locks on the second floor until you find the right room. You don't really think I'd take advantage of your absence and harm such a rare specimen of human womanhood, do you?"

Francesca was lying on her side, with one leg bent back at the knee. Jason couldn't see any blood on the floor but that was a meaningless indicator. For all he knew, half the blood in her body could be pooling along the inner surface of her wet suit.

Jason didn't think Kelly was vicious. No one could think Kelly was vicious. But he was erratic. He had bounced from bribery to armed assault

without a pause. And Kelly was, in the end, under all that ballroom polish, a hoodlum whose primary value to his employers was his cheerful indifference to the harm he inflicted on others.

Wouldn't they all be better off if he eliminated Kelly before he ran through the door and started searching the second floor? Michael would be safe, the tucfra wouldn't have to replace Francesca, he wouldn't have to deal with the possibility Kelly was coming up behind him with a gun.

Jason's legs had started carrying him forward before his brain knew he had made a decision. He charged down the walk with his arm extended. His vision tunneled on the little head and arm movements that would indicate Kelly was about to fire.

He knew it was an emotional response. He knew he had just been rationalizing. It didn't matter. He couldn't leave Francesca unprotected. Kelly had pressed the right button.

Kelly rested his hand on the barrier. He swung himself over the top with an agility that would have impressed a gymnastic coach and sank to one knee near Francesca. His left hand reached for Francesca's gun.

Francesca's head had settled to the floor but she still had some life in her. Her hand made a sudden convulsive movement. The gun slid across the walk toward the water. It reached the edge butt first and hung there for a long moment before the extra weight tipped it over the side.

Jason thumbed his laser—and saw Kelly roll to the left just as he closed the switch. Kelly snapped off a pulse and Jason responded by sprawling over the barrier and rolling onto the floor on the other side.

He flowed to his feet as soon as his knees touched the floor. His body was functioning as if it had been lifted out of the most unrealistic daydreams he had played with during all the years he had been a blob.

He pivoted over the barrier on one hand. His brain ticked off the seconds since Kelly had pulsed his laser.

## **CUSTOMER SERVICE OR SUBSCRIBER ASSISTANCE**

Please direct all changes of address  
and subscription questions to:



**ASIMOV'S SCIENCE FICTION**  
6 Prowitt Street,  
Norwalk, CT 06855

Kelly had recovered from his roll and begun to stand up. He lifted his head as Jason came over the barrier and realized he would be outclassed if he tried to go hand-to-hand with the speed and strength of the augmented juggernaut hurtling toward him. He twisted to the left and Jason's switch to unarmed combat ended with a kick that glanced off Kelly's leg.

Kelly's arm shot out. Jason threw up his hand. An optical needle pierced his wet suit and drove through the tissues of his forearm. The pain only lasted a moment. The neutralizing system the tucfra had included in his physiology kicked in on schedule. But the shock gave Kelly time to back up—toward Francesca.

*"Save Michael. That's an order. Save Michael or I'll recommend they dump you back in the body they saved you from."*

Francesca had turned up the volume on her implant. The anger in her voice seared him more than the laser had.

Kelly was crouching near Francesca's feet. The light on his laser blinked to green and he pointed it at Francesca's neck. His left hand stroked her leg.

"What's a seep like, body double? Did they do anything special in that line when they packaged her for our good friend Michael?"

Jason broke for the door with his left arm dangling by his side. He shoved the handle of the laser into his mouth and pulled off a trick that shot another rush of exhilaration through the fog of confusion and conflicting emotions he was hauling down the walk. His right hand flattened on the top of the wall and he pivoted over the top on his good arm and dropped into a crouch.

He looked back as he galloped through the door. Kelly was pounding down the concrete after him.

He wouldn't have heard a sound if Kelly had used the sword on Francesca. In her state, she wouldn't even scream. . . .

Byron Trainee had broken through the jamming once again. Francesca had apparently ordered him to start his assault and his techies were staring at symbols and doing techie things with cursors and menus.

"I think the fifteen-minute estimate may actually be accurate," Byron said. "Can you last another twelve minutes?"

Jason was running down a corridor that ended in a stairway. Eileen had told them Michael was "resting on a bed in a comfortable room" and they had assumed that meant he was confined in a bedroom on the second floor, as Kelly had claimed. The rooms on the first floor were all changing rooms and storage areas.

His next move was obvious. He had to get to Michael before Kelly did. If he couldn't do that, he had to hold Kelly off until Byron and his squad entered the boathouse. If Kelly got control of Eileen's lethal setup, they would all have to back off and let the situation return to the original standoff.

He had kicked the door shut on the run but it only held Kelly for a moment. Jason looked back when he was three steps from the stairs and got another look at the grin he had seen on the face of the guard shark. Kelly's right arm was extended in front of him.

The tucfra combat enhancements had their limits. The pain neutraliz-

ers had masked the effects of the awkward stride and the burn on his arm. The drain on Jason's energy had narrowed the gap between his speed and Kelly's. Kelly's laser was about to close it.

Jason's body might be slowing down but his brain was still chugging along at the kind of pace it had started maintaining when it had been the only part of his physical endowment that offered him pleasurable experiences. Should he climb the stairs and make a stand at the top? Should he stay on the first floor and try to change the battery after his next laser shot? With one hand out of action? While he was being harried by an armed opponent?

His brain apparently decided neither course looked promising. He turned, one step from the bottom of the stairs, and pressed the firing button as he swung the sword into line.

Kelly was moving too fast to stop himself. He ducked under the unexpected sidesweep and fell into a staggering crouch, with his free hand groping for the floor.

It was a good enough response for the decision the logic engine in Jason's head seemed to have made. He dropped his own sword and lunged forward. He couldn't outrun Kelly, but he could still take him on hand to hand, even with one arm out of action.

Kelly's sword flashed. He rolled away from Jason's lurching assault and Jason closed with him as he stood up. Jason's right hand clamped around Kelly's wrist.

It would have been a simple problem if his left arm had been functioning. Hold Kelly's wrist with his right, snatch Kelly's sword with his left. Kelly was slamming a kick into Jason's lower right leg, but Jason's pain blocking reflexes reduced that to a minor nuisance.

He let go of Kelly's wrist and grabbed for the sword. There was a moment when he wasn't sure the glove of his wet suit could maintain a grip on the thing. Then it came free. He responded to Kelly's kicks with a kick of his own and Kelly fell back.

The light on the sword turned green. He turned toward Kelly with his thumb on the button and Kelly scurried out of range.

Jason backed toward the stairs. Kelly pointed at his stomach.

"Take a look at your gut. That hole may look insignificant, but you're probably bleeding all over the lining of that suit."

Jason's heel located the bottom of the staircase. He sank onto the second step and gestured with the sword.

"I've still got this thing, Kelly. You can stand there and wait for me to keel over if you want to. But it's not going to happen."

"It now looks like we're going to be entering on the first floor," Byron was saying. "Into the second storage room from the land side, on the east side. You may hear a small explosion."

"You're going to sit there and let yourself bleed to death?" Kelly said. "Your masters will be touched."

"I only have to hold out about ten more minutes. As you are well aware."

"And what about afterward? Have you thought about that? Even if you last the full ten minutes—isn't there some possibility you may suffer irreversible brain damage before your rescue party can whisk you to a

trauma center? Have I underestimated the powers of tucfra medical technology? Or will they simply replace the damaged brain cells with components they consider more suitable?"

Jason could hear the fatigue in his own voice. Would he slip into unconsciousness without any preliminaries, the way he had fallen into sleep during the years when he had fought off despair by immersing himself in videos and music until he dropped into a few hours of oblivion?

Kelly had taken a step forward while he talked. He was still smiling but the eyes above the smile were watching Jason's every move.

"Don't assume you can work your way into rushing range," Jason said. "I'll press the button when I know you're so close I can't miss."

"And when will that be?"

"I'll leave that question open."

"A wise policy. Has it occurred to you I have full access to the security system? Voice recognition. Password. Implant ID. Think about it. I go upstairs, the security system shuts down the moment I say the magic words, and your friends rush in and hurry you and Mrs. Gratzhausen to the nearest emergency unit."

"And leave you in possession of Michael."

"We'll be right back where we started—minus Dr. Levar's somewhat capricious contributions, of course. A tactical victory for your side, I would think."

"You don't understand the tucfra, Kelly. They'd put us in the same class as Eileen if we did something like that to save ourselves."

"But you wouldn't be saving yourself. You'd be saving *her*. You're not the only paragon whose intellectual powers could be permanently damaged."

Jason's eyes blurred. The muscles in his neck slackened.

"We can even reconsider the suggestion I made earlier," Kelly said. "I wasn't just talking to lure you to your doom, body double. I admit I had decided my faction would be better off with you dead and Michael still alive, but my little proposal seemed like a reasonable alternative if you seemed receptive. It still has its attractions. I go upstairs, Michael succumbs to a twist of the valve, the rescue party rushes in, and you convince our interstellar lords you did your best and they should keep you here."

"And arrange a discreet payoff sometime in the future."

"In the not-too-distant future."

"You could even remain on good terms with *your* employer."

"To our Director of Security I would just be a loyal retainer who had carried out his most extreme orders."

"I'll offer *you* a deal," Jason said. "If you stay here, you'll be outnumbered as soon as my reinforcements arrive. There's two speedboats sitting out there. Go now and I'll tell our patrol boat not to fire on you. The speedboat will be yours."

"A generous offer. . . ."

The speedboat was, in fact, worth enough to keep people like them happy for several years—as Kelly undoubtedly knew. Kelly could sell it. Keep it as a toy. Start an exciting new career as a coastal pirate.

"It's a sure thing for both of us," Jason said. "Versus the gamble I won't last until our rescue party breaks in."

"And all because you're afraid of your paymasters."

"Not quite."

"There's something else?"

"You may not believe it, but Francesca and I—we both believe they're doing the right thing. Whatever their motivations. They're pushing us in the right direction. People like Michael—they really are the kind of leaders we need. They'd be shoved aside by people like the conniver you're working for if the tucfra weren't intervening."

Kelly stared at him. "I believe that's the first time I've heard you voice that opinion. . . ."

"We aren't mercenaries. We didn't just sign up for the medical benefits."

Kelly frowned. "Medical benefits, body double? Your conversation takes odd turns."

Jason raised his head. It took a major effort but he knew he had to convince Kelly he could stay conscious until Byron charged to the rescue.

"Take my offer, Captain. Leave here with a boat now—or stay and leave empty handed. If they let you leave."

"You haven't told me about the tucfra medical benefits. I might be looking for a new employer, you know."

Jason's head dropped. He saw Kelly's foot slide forward and raised his hand.

"Stay back . . . don't be a fool."

"Is that what they offered you? A handsome, superhuman body? Beautiful women dazzled by your physical endowments? Heroic feats of masculine prowess?"

Jason forced his head up. "Do you remember the slackbody virus?"

Kelly stiffened. "You had *that*?"

"From the time I was six. For twenty-six years."

The tucfra pain control system couldn't repress everything. Most of the area around Jason's stomach felt numb. He wasn't feeling any pain but his brain knew it should feel uneasy.

"That would inspire some gratitude. . . ." Kelly said.

Kelly's face had changed. He had been smiling right up to the moment Jason had mentioned the slackbody virus. They had been fighting for their lives and Kelly had been bantering as if they had just finished an unusually vigorous practice session. The goggles still hid his eyes but the smile had disappeared. Jason could even detect a shift in his facial muscles that could be interpreted to mean there was some danger Kelly might actually be teetering on the edge of sympathy.

What was it like to be a naturally athletic daredevil all your life? Kelly had probably been charming himself into female bedrooms since he had been a teenager. Had there ever been a moment in his life when he had felt physically insecure? Was he visualizing the kind of life Jason had led?

"It isn't just gratitude," Jason said. "I had nothing. Name anything you like—your speedboats, games, women. Think about year after year without a single item on your list."

"And then someone comes along and offers you a life."

"What would you do if you were in my position now, Captain? Wouldn't you sit here until the moment you keeled over dead before you'd go back



to *that*? Wouldn't you think nothing mattered—nothing at all—not even Francesca—compared to *that*?"

That wasn't actually true. Jason had made a life for himself, in spite of his illness. He had lived alone, in complete independence, in a computerized apartment that gave him all the care a pair of round the clock human attendants would have given him. He had handled an interesting administrative job and hobnobbed electronically with dozens of friends and colleagues. He had even been visited, now and then, by women who felt sorry for him. But Kelly wouldn't know that. There was no way somebody like Kelly could understand that.

"Take my offer. Take the boat. Don't gamble you can beat somebody with that kind of motivation."

Jason's head slumped. He tried to pull it back up and discovered he couldn't. Energy was flowing out of his body as if the hole in his side was as big as a plate.

"There are legal formalities regarding the ownership of the boat," Kelly said.

"I'll transmit an order as soon as you clear the main door. As Michael. No one will trouble you. You have my word . . . as an officer of the Tucfra Hegemony."

Kelly's boots moved backward. Jason raised his head a few degrees and watched him under his eyebrows.

"It's been an interesting evening," Kelly said. "You're a very impressive fellow, whoever you are. I hope your masters appreciate your efforts."

Jason held himself awake until he heard the roar of the speedboat hammering on the walls of the docking pool. The order to transfer the property went out, as promised, just before he let himself drop into the darkness.

The tucfra officer looked like all the other tucfra officers Jason had ever talked to—a fit, trim man somewhere between thirty and fifty, but obviously closer to twenty-five from the neck down, whatever his face indicated. This one was clean shaven—unlike most of his compatriots, who tended to sport fancy mustaches and beards.

"Your attempt to help your superior was a serious error, Jason. Her statements make that clear. You could have hotfooted it straight to Michael's bedside once Captain McMay had backed away from the door. Instead, you reacted to his threat to Francesca and chose to engage him in more combat. Out of fear he would harm her."

The officer's face took up half the screen. In the other half, Francesca was lying in a bed that looked as if it was the same kind of generic hospital rig that Jason occupied. She still had a tube in her nose but he couldn't detect any indication she was drugged. She looked tired, not sedated. She hadn't changed her expression when the tucfra had plugged him into the circuit, but that blank, emotionless face was the look she normally adapted when she faced a tucfra. . . .

"Francesca has issued a formal reprimand. Properly, in our opinion. You were given your priorities, Lieutenant. Your emotional entanglement with your superior officer is a trivial matter compared to the life we entrusted to your judgment. Francesca understood that. She told you to dis-

regard her situation and proceed. If Captain McMay had killed you, or inflicted certain kinds of injuries, Michael would still be a hostage. And we would be scrambling to replace you with another duplicate."

Had Francesca's face hardened slightly when the tucfra mentioned the reprimand? Had he seen a flicker in her eyes? It had been two weeks since Jason had last seen her. He knew Michael had returned to his proper role in life. He knew the public had been told Francesca was recovering from a boating accident. He had even received a visit from Byron Trainee. But he had no idea how Francesca felt. There had been no messages. He had hoped Byron was bringing a message, but they had spent most of the visit discussing Byron's regret that he hadn't played a bigger role in such a dashing clash of arms.

"Francesca was herself in the wrong, of course, when she let you become emotionally entangled. Her decision to assault Dr. Levar may have been influenced by her feelings, too. There was some probability, after all, perhaps a very high probability, that Dr. Levar would order Michael killed and Captain McMay would carry out the order."

The tucfra shook his head. "I'm afraid we seriously underestimated your human capacity for developing mate loyalty. It can be a notoriously erratic emotion in your cultural tradition."

The tucfras' sex life had been surrounded by rumor and speculation ever since they had started interacting with humans. For all anyone knew, they might not even have sexes. They always adopted male bodies when they assumed human form, and thousands of human women had visited the Sahara, but their feelings about their sexual partners were a mystery.

What would they do if they expelled him? Would they return him to his old body? Could they be that hardhearted?

He was looking at a personal disaster. And he had to lie here and confront it like a stoic model soldier while he floated in all the turmoil and emotional conflict that seemed to be an inevitable component of a true love affair. Had Francesca reprimanded him because she felt she had to protect herself? She hadn't given him a glance or a quick smile or any other indication of her feelings when she had appeared on the screen.

"I think you can understand the situation we're faced with, Jason. Is this just a temporary aberration? An understandable lapse after all the years you were denied the male-female emotional relationships that dominate the lives of human males in areas influenced by your culture? Or is it something we will have to be concerned about when you receive future assignments? Do you have any thoughts on that?"

Jason hesitated. What would someone who had more experience with the tucfra answer?

"Just tell me what you really think," the tucfra said. "Don't try to guess what we're looking for."

Jason smiled. "That's a bit difficult under the circumstances."

"It's your best course, Lieutenant."

He shrugged. "All right. You placed me in the same bed as an extraordinarily attractive woman. A woman who is exceptionally warm and sympathetic in addition. I fell in love with her. How could I have helped it? I would have fallen in love with her even if I'd lived a normal life up to

now—even if I'd already had all the emotional involvements most people my age seem to have had."

He turned toward Francesca. "If you're afraid I may scramble another mission for the same reason—it's going to be *harder* for me to fall in love with anyone. I love you, Francesca. I'll always love you. Everybody I meet from now on will seem pale beside you."

Did he see the hint of a flash in Francesca's eyes? She loved him. She had said she loved him. They were two of a kind—two people lost in unsatisfactory lives who had seized what the tucfra had to offer. Couldn't the alien consciousness hiding behind the tucfra officer's human face understand that? Was this *creature* so far removed from human feelings he thought an oath could always take priority over the hungers and needs that drew men and women together?

The tucfra nodded. "Well said, Jason. Well said. Do you love Jason, Francesca?"

"Yes."

"Would you like to marry him? Leave your post? Go off somewhere and spend the rest of your life with him?"

"Yes. But I won't."

"And why is that?"

"You've given me a mission. You can send a substitute—but nobody can understand Michael as well as I do. Nobody else has all the years I've spent with him. All the knowledge I've accumulated. I'm the best person you can station here."

"And you love your children, too, right? You want to make sure they take the place we've been preparing for them."

"Yes."

"Would you like to say goodbye to Jason now?"

"Is he going to be all right?"

"I can't discuss that."

Her face softened. "Goodbye, Jason. I do love you. Please believe I love you."

Francesca vanished. The tucfra officer took over the whole screen.

"I think we can make a decision, Jason. I could pretend we were mulling things over and checking your records and so forth. But that would be pointless. And cruel, too."

They gave him two months leave, in Michael's body, with minor cosmetic modifications, in a resort on the coast of Chile. He spent most of his evenings and afternoons with the women he attracted. In the mornings—and some of the evenings—he played a cello he had purchased.

They had told him he could probably keep his musical skill as he moved from body to body in the future. It was a useful recreation and it might even be something they could take advantage of on certain kinds of assignments. He played the same three sonatas over and over, with a program that played the fortepiano accompaniment and adjusted to his personal style in the same way a human accompanist would have responded to it. It was a good program—so good there were times when he felt he could see the person he was playing with. ○

## CLASSICS OF SCIENCE FICTION: "THE COLD EQUATIONS"

She went out voluntarily,  
She gave all that she could give,  
Chin high, and out the airlock,  
So that thousands more might live.  
She should've been a hero,  
But she was just a girl,  
And sex trumps logic everywhere—  
At least in this cold world.

She hid out in the closet,  
She did it as a fling,  
But girls don't have that option.  
Only boys can do that thing.  
'Cause boys have spunk and daring,  
While girls have warmth and soul.  
She'll never find a husband now,  
For she stepped outside her role.

It's an old and twice-told story,  
But that don't mean it ain't true:  
When the gas is low, something must go,  
And logic says it's you.  
Men may claim to pull their weight—  
"Authority is hell"—  
But women always pay the freight,  
And take the blame as well.

—Jack O'Brien

# SPIDERS

Sue Burke

Sue Burke spent a few decades working as a journalist before turning to her childhood love, science fiction, which she got from Mom. Her publications include short stories in *Escape Pod* and *Interzone*. Sue's first sale to *Asimov's* was the poem "The Sonnet from Hell" (April/May 2006). "Spiders," her first short story for our magazine, is set in the world of *Transplants*—the author's novel in progress. More information about Sue's writing can be found at [www.sue.burke.name](http://www.sue.burke.name).

**J**ust before we went into the forest, I found the sort of thing I wanted to show my son.

"Roland, look, there's a leaf lizard nest that just hatched. They look just like little leaves of grass, don't they?"

Springtime. Everything was coming to life again. And just beyond arm's reach, I saw what looked like a dried-up fern but probably wasn't. I kept an eye on it as my boy and I squatted and studied the ground. The lizards were hard to spot at first, but finally he giggled and pointed.

"They're very little, Daddy."

"They'll grow. But now they're so little that they can't hurt you. You can let one walk on your hand."

And so we did, green whips with legs, just half the length of a five-year-old's finger. I told him how they hide in the grass, head down, waiting for even littler animals to come past, then they jump down and eat them. That was why if we let our hands hang down, the lizards would climb down to the tips of our fingers. Their natural place to be.

That supposed dead fern next to us had a crown of eyes. Sure enough, it was a mountain spider. Second one I'd seen so already our little walk. Why so many this spring? Like a lot of things, they had an Earth name because they were sort of like the Earth creature. From what I gathered, spiders on Earth were never bigger than your hand, but ours were bigger than your head. Both had multiple legs and a poisonous bite. Were ours as aggressive as Earth spiders, which often bit people? Were Earth spiders as smart as ours?

"Let's put the lizards down so they can get about their lives." I set my hand on the ground and, with a little encouragement, the lizard

climbed off. Roland copied me, and we watched them disappear into the grass.

Then he turned to me, eyes worried. "Do we step on them and we don't know?"

Good question. Maybe he would grow up to feel like I do about the forest.

"I suppose sometimes. We're big, so we can't help making mistakes. I think we should never try to hurt things if we don't have to. I hunt, you know, but I never kill anything except to eat or to protect us." But I didn't want to lecture. "Let's go into the woods now, okay?"

I didn't point out the spider. His mother would kill me—or make me wish she would, just kill me and stop yelling—if she knew how close we were to spiders. Not just the one next to the path, but all over. Lots at the riverbank, but everyone knew that because they stole fish. They were in the woods. In the farm fields and orchards. I'd even seen one in the city, and I shooed it out. Most people didn't notice. If you don't look hard, you don't see things.

And if you don't take advantage of your chances, you lose them. I get time with Roland most days, but never enough. Spring only comes once a year, and a boy is five only once in a lifetime. So off we went. I'd just have to be extra careful.

"Are we going hunting?"

"No. I mean, I thought I'd show you things. There's a lot to see."

"Deer crab?"

"Oh, sure. And birds and insects and kats—all sorts of things. Listen. Hear that?"

"Pii, pii," he repeated.

"Exactly. That's a turnstone lizard."

"More lizards! I can't remember so many lizards."

I spotted it near a stump. "I know, it's hard. There's lots and lots of kinds. Shh. See it? It's black and white and brown with big stripes."

I knelt and helped him spot it.

"Wow. It's a jewel lizard," he said.

"Not quite. You wouldn't want it in your garden. It digs things up. Do you see what's next to it? That dead bush? It's getting closer and closer . . ."

The bush, of course, was a stick-feather bird. It suddenly grabbed the lizard, bashed its head against the stump, and began to tear off legs to swallow. Roland jumped to his feet.

"Animals hide in the woods," he said. "Eagles sometimes. Mommy says the woods are dangerous. That's why I can't go there alone."

Mommy says—of course she does.

"We make sure the eagles stay away," I said. "There are things to watch out for, but mostly the things that hide want to avoid us, not get us." Mostly. I didn't want him scared, so I'd have to find something non-scary fast. "Let's keep going."

He seemed relieved to get away from the bird. We walked a little, then I had an idea. "Can you think of other things that hide?"

"Hide?" He looked around.

"How about kats?" I suggested. "Why is their fur green?"



"Um, they're green so they can pretend they're grass lizards. A whole lot of them." He laughed. A joke, apparently. So I laughed too.

Then I saw a good example.

"How about that, there on the tree trunk? That's lizard poop for sure, right?"

"No, Daddy. It's not." He had me figured out.

"Right." I reached out and nudged it. It flew away.

He shrieked with delight. "A poop bug!"

"A blue firefly, actually."

"That's a firefly? They're so pretty. Everybody likes to watch them."

"Their light is pretty. But when they land, they look like poop so that birds and lizards don't eat them. Most people don't know that. They just look at the lights that fly around at night and don't find out about what's making the light. But now you know." Our eyes met, sharing a secret.

Just above us on the tree, I realized, there was a spider close enough to reach out and touch my shoulder.

"Let's keep going and see what else we can find."

"What if kat poop is really little bugs? I mean, little bugs that looked like kat poop?"

"You really like kats, don't you?" The city kept a colony of pet kats. "What do you like about them?"

He began to tell me about the dance he and the other children were learning with the kats, and demonstrated the steps. I tried to pay attention, but I kept thinking about the spiders.

Far too many of them. They usually lived in the mountains just below the tree line, rarely in our woods. Maybe they had had a population explosion. Maybe the weather, cool and dry for springtime, made them feel comfortable lower down. Maybe our colony attracted them. Or maybe something was pushing them down, like predators or hunger.

I spotted something Roland needed to know about, and I hoped it wouldn't scare him. I'd try to make it sound good.

"I'll show you something else that's not what it seems like. See those flowers? Those are irises. See how they sparkle? Very pretty. But don't touch them. They have tiny pieces of glass on them, and they'll cut you. Do you know why? Because they like blood. It's good fertilizer. Now don't be scared. Just know what they are and don't touch."

"They're very sparkly."

"Yes, they are." Not far away, a spider sat in a tree over a patch of moss that was really a kat, flattened to the ground, hiding in plain sight. I took a step to lead Roland away before the spider figured it out, but the boy wouldn't move.

"They're like jewel lizards," he said. "The flowers look like red lizards and yellow lizards."

"You're right. I never noticed that, but they do look just like lizards."

"Maybe the flowers catch things that think they're going to catch lizards."

"I bet that's it. Pretty smart to see that." Why hadn't I before? I complain that people don't look, and I don't look myself sometimes.

"They can't catch me," Roland said, "because I'm smarter than they are!"

"Exactly. Let's go. You know, when we have our hunters' meeting, you should come and tell us about that, about the flowers. We're always trying to figure things out. Well, that's something that you figured out about irises."

"Me? I can talk at the hunters' meeting? Really, Daddy?"

"Yes, you can. The discoverer gets the honors." I'd watch him talk and feel proud of my boy.

We were desperate to know more about the spiders. Their venom could kill a kat or other fair-sized animal. No one knew what it could do to a human and no one volunteered to find out. They never attacked us, either, though if you got too close to a nest, they'd gibber and wave their legs and snap their jaws to drive you away. They'd steal, too. Fishing crews had to watch out. They moved too fast for us to catch them and dodged arrows like it was a game. In fact, they had figured out the range of our arrows and knew to stay just beyond it.

We often met and talked about spiders, everyone together: hunters, farmers, fishers, even the kitchen crew, because our kitchen garbage might attract them so it couldn't be dumped just anywhere. We never could dump it anywhere, actually, but spiders had people scared. Tiffany, for example, Roland's mother, who for one brief time made herself seem like the perfect woman for me—but that's another story—was preaching extermination. I worried that if we started a fight, the spiders might keep it going. As the lead hunter, I needed to offer a plan of my own.

Honestly, I didn't know enough about spiders to know what to do.

"What's that?" Roland said, grabbing my leg and hiding behind it. Something was crashing through the underbrush toward us. I knew right away.

"Over there?" It was moving fast and barking loud.

"It's big, Daddy."

I picked him up. "No, it actually isn't, and it won't hurt us. It's just birds, a lot of them. Bluebirds. See?" He hung on tight but leaned to get a better look. "Bluebirds. Hear them bark? There's lots of barks, so you know it's not one big animal, it's a lot of little animals. They like to run around and make a lot of noise so they can scare up things to eat. All in a line, zig-zag. Look, they're stopping. Maybe they found something. Let's see what."

I walked toward them slowly. "Usually they let you get close. When you get too close, they tell you." I was almost five steps away when the alpha bird turned, barked at me and glared. I took a step back. It went back to eating.

"That's as close as we can get. They don't want trouble, so they warn you. They don't attack if they don't have to. What do you think they're eating?"

He leaned out bravely. I leaned with him. The bird turned and barked, casually, just a reminder. I knew what they were eating from the way they were arranged around it, but I waited for Roland.

"It's purple! Is it a slug?"

"Yes, they like to eat slugs. That's why you should never hurt a bluebird reef. We want them to live around us, so we respect their homes."

Slugs. Chunks of mobile slime that dissolve flesh. If there was something to exterminate, those would be it. But we could never get them all.

Where there's one, there's more. I heard a sudden hum too close to the left . . . something moved fast. I stepped back. It was a spider wrestling a slug, brown legs wrapped around a purple glob. A brief squirm, then the fight was over. The spider picked it up with four legs and hurried away on the other four, not as fast or graceful as usual but gibbering in a way that I swear sounded proud.

So they caught slugs, and were happy to do it. Efficient, too. News to me, and worth knowing. Just a few animals could do that. Maybe a chemical protected them, or extra-tough skin. It would be more than handy to have another slug-eating animal around. Especially if they turned out to be no more scary than bluebirds. But would Tiffany believe that?

Roland was still watching the birds. Good. The spider fighting the slug might have scared him, and his mother wanted him scared of the forest. I did not. Yet another difference between her and me. She liked safe things, and I liked living things.

Every night I dreamed of the forest, and every day I woke eager to go there. Not everyone did, of course. They liked making things with their hands or coaxing crops to grow. They were satisfied, and who could blame them? But the forest—you're there, but you don't make it and you can't coax it. It's not even an it. It's a you, I mean, the forest is alive and does things, reacts, watches, even attacks. Full of tricks and beauty. I hoped I'd showed some of that to Roland. But he was getting fidgety in my arms.

"Time to go home?"

"Okay, Daddy."

Something in his voice troubled me, and I tried to figure it out as I headed down a trail that led out of the woods. He seemed unhappy. With me? With the forest? Was he bored? Or worse, scared? Good thing I hadn't pointed out the spiders. Who knows what Tiffany had told him?

We kept talking on our way out. He asked "What's that?" "What's that?" about trees, lizard hoots, but more like a game than curiosity. A couple of times I saw him looking in one direction while he asked about something the other way. Young children had short attention spans. We probably had been there too long.

I set him down when we reached the fields, and he pointed at a lentil tree, its purple leaves contrasting with the greening fields around it.

"Mommy says you have to grow them far apart so if one gets scorpions, they doesn't get all the trees," he said.

I knew that, but didn't want to disappoint him. "Is that why? So there's a tree here, and there, and way over there."

"And you have to prune them. Every spring."

"Carefully, I bet."

"Very carefully. And you can't plant snow vines next to each other. They fight."

"Like this?" I raised my fists.

"No. With roots and, um, with just their roots. It's very challenging to maintain an orchard."

Those were Tiffany's words exactly, right down to her intonation. Of course, she spent more time with the boy, so she had a bigger influence, and maybe he'd grow up to tend orchards or crops instead of hunt in the forest. Perfectly acceptable.

The city rose across the fields, surrounded by a brick wall. Two hundred people. After four generations, we finally had enough to eat, even a surplus. We had domesticated several plants and animals, and were still learning about others. Every year we discovered new surprises about the planet. And every kind of work was needed. Maybe Roland would become a carpenter, a medic, or a cook. All perfectly respectable.

"You know," he said, "we don't hide. I wonder what animals think? They see us and we don't care if they do." He sounded like a little adult. Who was he copying now? "They think we aren't scared. If we're not scared of them, should they be scared of us?"

"That's a good question."

"That's a good question," he repeated.

Well, maybe I had helped him see that the world could be bigger than you are, and that was okay. Even if you didn't understand everything in it.

"We have to take care of our trees," Roland said, sounding like himself again. "If they're really happy, maybe they can dance." He looked up. "Are trees happy in the forest?"

"I think so. That's where they live. Did you like the forest?"

He spent a long moment thinking. "Yes. I saw lots of things." He looked up with a sly smile. "Daddy, you didn't see. There were spiders everywhere, and they were looking at us." ○



"His insights will, of course, be sorely missed—but this *does* imply we're on the right track."

# MASTER OF THE ROAD TO NOWHERE

Carol Emshwiller

**Carol Emshwiller's 2006 story "World of No Return," which became the basis of her new novel *The Secret City* (Tachyon Publications), showed us an alien could attempt to pass himself off within the confines of our culture. Moving in even closer, she now reveals how another group of outsiders might find a way to survive at the very edges of our society.**

**W**hat we know so far: That we are few though we used to be many. That, through no fault of ours, we no longer have a land of our own.

It was the season to go from the fish and frog's legs, to the pine nuts, but the way was barred by new housing settlements, so we turned to the berries and the rabbits, and that way was barred, too.

Our group asked the man guarding the crossroad if there was a hidden valley anywhere in these mountains, and how to get there if there is one.

He took our dollar and pointed out the way. We could see, at the end of the other road, a town, all its windows shiny in the morning sun as if telling us to go that way, but we went in the direction he said, away from the town, but it was hard and always up. We wonder if he just wanted to get rid of us. We've walked . . . climbed mostly . . . for two days but so far we haven't arrived anywhere. Now that we're in unknown territory, even Grandma doesn't know which way to go.

The road dwindled to little more than browse trails but we kept on. We went the way the wild things had gone. Up into nowhere until we said, stop. Not because we liked it here, but because we were tired.

We sat on stones and said, this is as far as we go. We said it even though everything here is stunted. Plants that usually are bushy and lush, here hug the ground and lean over. On some there are little berries that, lower down, are delicious, but here are dry and tasteless.

Maybe we can live off the people in that town. We're few now, maybe they wouldn't even notice. And we have somebody who's good at creeping around and stealing things.

They mean me.

Everything is down from here, and there's all these stones. We could pry them out and roll them down on people in case they find out it's us that's been stealing. And we have Our Big Man to do that.

They mean me.

So we make camp. Not easy in this wind. The ground is so hard we have to tie our tent ropes to stones.

At least there's no fear that anybody will pass by and bother us or steal our things—though we haven't much left to steal. Even so, Our Big Man will keep watch over us all night.

They mean me.

But I'm as tired as they are.

What we know so far is that the earth is in disarray, else why this empty, stony ridge? And why this wind? Why that man at the crossroads and not some other, kinder man?

I lean against a rock, shut my eyes and doze. Everybody huddles under shawls and rugs. The children whimper themselves to sleep.

I have kept us safe all this time though my staff has never been used for anything but helping me climb. Sometimes I let a child hang on to it and I pull him along. They call me Uncle.

I'm sure, as we all are, that that man at the crossroads deliberately sent us up here where there's nothing, not even a tree. He saw our little ones, why didn't he have any sympathy—at least for them?

What we know so far is that, if there is a heaven, trees will be there. Especially the dogwood. Especially in bloom. There will be strawberries. There will be poppies and quail and jackrabbits.

We've run out of food. We'll send Our Big Man down to steal, though if anything happens to him we'll be in trouble.

I'm not a big man. I was clever, that's how I got to be able to bring up the rear. Besides, that Former Big Man was old and wanted to leave the group to me. Everybody wanted me.

We tell him, bring us apples and potatoes. We say an onion would be nice. We say, "And bring something for the children."

I say, "I'll try."



I never take charge, it's not my place, but when they tell me to take the boy with me, I say, "If you don't mind, maybe next time." I'm not supposed to contradict, but I feel I must. He wants to come, but if there's danger up here, he's the one they'll need. I'll leave him my staff.

Our Big Man shouldn't disagree, but in this case we know he's right. We let him go alone and keep Our Boy with us.

It only takes me one day trotting down, though it took all of us three days climbing up, what with our bundles and our little ones. When I get close to the crossroads I duck behind brush. The same man is there. As before, he sits where the road branches. He's much bigger than I am and he has a rifle. But I can cut across beyond the man and wade their canal. I can be in town faster than the road would take me and I'll not have to pay.

I hide behind sage and bitter brush and circle around him, crouching. I only move when he's facing the other way. It's not hard.

Right at the edge of town I notice an apple tree in a backyard. Some of those would be nice for the children. The laundry hanging there will hide the person stealing them. I gather a few, zip them into one of my bags, and leave them in the shade of a boulder. I sit and eat one. I want to wait till twilight before going into town.

There are lots of rusty pick-ups parked along Main Street. Not many people about. I walk from store window to store window. My mouth waters as I pass the bakery but I mustn't pause there too long. Bread isn't for the likes of us. Maybe a box of crackers for the children, they should know what those are like. I'd like to show them some chocolate, too. The littlest ones have never had it.

I let myself get locked in the grocery store. I fill my backpack. I take things that won't be noticed. Mostly from the bins of loose things like nuts. There's a bin of pretzels and a bin of beans.

I leave the store and start around to back doors.

I'm thinking another blanket would be nice, but too hard to get this trip.

Before I leave town, I check out an empty house. I wonder. . . . How would it be if some of us came down and camped here? We might not be found out for quite some time. They might put me in jail. That would be an odd end to my stint as Uncle.

I head back to the apples, but here's Our Boy, right in that very backyard, gobbling them up as fast as he can. He'll make himself sick. What was he thinking, sneaking out and following me on his own?

Well, I know what he's thinking, but isn't he a little young for it?

He'll be a much larger man than I am one of these days. MaryEllenson. I didn't think he'd be trouble for another couple of years.

There's always a coalition. He might consent to that for a while.

I don't want to have to hurt Our Boy. The way things are these days, he's more important than ever. Grandma depends on him.

I creep up and grab him from behind. I hold his mouth shut to keep him from crying out. He hasn't learned much yet. This'll be a good lesson.

I press his face into the grass.

Foolish boy.

I whisper. "Does anybody know you followed me?"

He shakes his head no as best he can.

If he has any sense at all he'll realize how stupid he's been. I could kill him right this minute and there'd be one less problem for some other Big Man later on.

I wait until he's choked enough. I whisper, "Silence!" then let him go.

But he's about to throw up his apples. Just as well. I hurry him away—farther from the edge of town. I hold his forehead. I wipe his face. Coalition? No problem.

I leave him collapsed there and go back for the batch of apples I'd gotten when I first came into town.

He's a skinny young one, our biggest boy. A redhead. Freckled. No son of mine. I remember his father. That was a man worthy of being called "Our Big Man."

I feel good. I've even got some chocolate for the little ones. I have cheeses. Grandma and Second Grandma do love cheese.

Now all we have to do is get past the man at the crossroads with our stolen goods. Turns out MaryEllenson paid a coin to get here. We won't go anywhere near the crossroads. I show him how to do it.

A lot of admiration in his eyes that wasn't there before.

Coalition firmly established.

There's a bright almost full moon. We get well away and up into the first steep hills, then lie on our backs looking up at it.

"Uncle?"

"Hmm?"

"Thank you."

He knows he owes his life to me. That will be important later on.

When it happens, I hope Rosalia will come with me.

What we know so far is that there used to be moon watching platforms, one in each of our stopping spots. Those will be the first to rot away. Tent platforms and our hanging hooks will be next.

Everybody's happy to see us—happy that we're not locked up down there and that we're still alive, and happy about all the good things we brought.

They've started setting up a permanent camp. I'm not pleased about that, but if Grandma says it must be so, then it has to be. I believe Grandma is being led by her sore knees rather than her head. There may have been objections, but I wasn't there to hear them. Everybody is working to make sleeping spots with drainage ditches. There isn't much usable brush. They've laid out a spot for me. They're going to enlarge it for MaryEllenson now that we've formed a coalition.

We have done as Grandma said to do. At first we argued about it but then

realized it had to be or we'd lose Grandma. None of us wanted that. This is not a very good spot to lose a grandma. Second Grandma changed her mind right in the middle of arguing against it. We understood and voted for it along with her, wondering all the while what Our Big Man will think. This puts more of a burden on him than ever before. We fear that town will be our only resource. But we're glad he'll have MaryEllenson to help.

MaryEllenson swaggers around as if he's already bringing up the rear, elbows out, knees half bent. . . . Everybody smiles behind their hands. Even Our Big Man.

What we know so far is that some of us starved out of kindness to others. They gave away their food and died quietly in the night. Some slipped away, who knows where? Perhaps they threw themselves into the sea when we were near the sea, or into a rushing river to be taken back to the sea.

We think we're being followed by one of our men. We think it's Ruthson. We haven't seen him for six years. We'll be happy to greet him, but we're worried about what might happen to Uncle. But setting our village way up here may change things. We don't think Ruthson would like living here. None of us want to. Uncle will put up with it, though, and not complain. He's one of the sweetest ones we've ever had.

That night it storms. A real top-of-the-mountain storm. Water in all our tents, and the drains we shoveled overflowed. Grandma got wet. We can't stay here. Second Grandma thinks we should overrule her. This would be a big thing. (Second Grandma is Grandma's little sister.) But even if we overrule her, we don't have to leave her here, though it's often done. We can take her with us to a better place. Our Big Man can carry her.

They mean me.

Our Big Man says there's an empty house on the outskirts of town, with a fireplace and four rooms. Living in a house, we'll not be keeping to our way and towns scare us. All those people and not a single one living or even thinking as we do, but it's just till things warm up. And not all of us need go there, just the littlest ones and Grandma and a couple of us to look after things. Our Big Man can go back and forth and MaryEllenson can help.

We'll tell Grandma it's only until she's well again. Of course she'll know better than to believe us, but it'll save face.

I carry her. At least the way is mostly down.

I don't know why we don't have even one beast of burden. Have they all, long ago, made a decision about that? None of us Big Men would have had a say in it or it would have been decided differently. Even a donkey would be better than nothing. Or what about an elderly stallion that's been kicked out of his herd? I'd relate to that considering my situation. Or a young one still in his roaming years.

All of us men have had a few years on the fringes of the other life. Many

of us have lapsed into that world, mated with one of them and been lost to us. Others, if they refuse to mate with any but their own kind, are condemned to a life of nothing *but* "the roaming years."

During my "roaming years" I rode a motorcycle. Now and then I drove a truck for a farmer in exchange for food and shelter. Sometimes I sneaked into classes with the farmer's sons. I've even had some college. Not that any of this is useful to us. Mostly we need to know how to protect and serve and service, and, when the time comes, how to fight.

What we know so far is that we will return to the sea no matter where we die. All our dead must be returned to water.

We ensconced Grandma in the empty house in the middle of the night. Less than half of us came down to do it. Thank goodness the house is well away from other houses and surrounded with a hedge in back and a fence in front. Our candle lights won't be seen. There's a nice outbuilding, too, only a few feet away from the main house . . . a rickety garage. Just right for Our Big Man.

We left Our Boy up with the others. He was proud to be in charge of protecting the group all by himself.

Grandma got wet again when we had to cross the canal. Our Big Man was so tired from carrying her on his back for two days, he actually fell in. Thank goodness, at the spot where we crossed, the canal is only two feet deep, so no great harm done except for getting wet and cold. (That water comes straight down from the snow on the mountains.)

After we got Grandma dried off and in bed, we went out to the garage to see to Our Big Man, but he was already asleep. We covered him with a rug and left tea and crackers beside him. In case of ants or mice or rats, we left everything in a tin box. Rosalia went out later to add her shawl to the rug. We approved of that.

What we know is that we used to be but one of more than seven groups. We know that babies died. We ask ourselves: Are we the last of those who live as we do?

I wake up sore and just as tired as I was last night when I collapsed. I hope there's no new chore for me this morning. I'm still wet. I didn't have the energy to change into something dry—if there was something dry. What Grandma has been feeling in her knees, I'm feeling now myself.

I lie, not moving. Then I notice the shawl around my shoulders. I know whose it is. I feel better right away. I sit up and open the tin beside me, drink the cold tea. Then I begin to feel dread. It's a fearsome thing, to be right here in a town. Almost any circumstances would be better than the way we're set up, half of us here and the other half on a windy hill—a long steep hike between us. That man who follows might get discouraged and wait for some better year, so I may have a little more time. Actually, if Rosalia will come with me, I'll be glad to leave. Wouldn't it be nice, just the two of us? We'd pretend to be an old married couple. I'd have to change my name.

She and I have a boy out there somewhere. Rosaliason. I should say, a man—by now. I wonder what became of him.

Rosalia was my first opportunity. I followed the group for several months. Rosalia got herself lost on purpose just to meet with me. She's the one, picked the spot, made it happen. It was dangerous. Especially for a not very big man. She knew that but she picked me, anyway. If not for her, I wonder if I'd have had the strength and know-how to become Uncle and take over the guardianship.

What we know so far is that there will be a hidden valley where the earth is black and soft and there'll be plenty of berry bushes. The water will run down from three streams that join a rushing river. One can die in peace knowing the way to the sea is open.

We're almost out of food again, but we let Our Big Man sleep. Grandma, also, sleeps on and on.

Our Big Man is getting older, too, but he's still clever. We've eaten better with him than with most of our others. But Grandma, dumped in the canal! That wouldn't have happened with a younger man. And now Our Big Man will have to keep those of us up on the hill fed and those of us down here, also. We can't let him sleep too long.

Second Grandma calls us all together in secret. We shut ourselves in one of the rooms and consult without Grandma. It's up to us. It always is.

I pull the shawl close around me . . . (Rosalia knitted it. I watched her. She didn't dare *really* give me such a nice thing, but she lends it to me every chance she gets, and she thinks of it as mine—as do I.) . . . and go to the house to see if they have dry clothes for me and anything warm to drink.

I find that they're all in a back room with the door closed. I don't dare knock. If I want dry clothes I'll have to find them myself. Grandma is still asleep. What I put her through! Wouldn't it be nice if, when the time comes, Rosalia and I could run away some place and bring Grandma with us? Until two years ago, she was a fun and funny leader.

One doesn't suggest such things. One doesn't even mention such a thing as, thanks for a shawl, knitted for a person's birthday but never given.

Since that man's been following us, I've kept a small paring knife in my pocket. I keep it wedged into the top of a fountain pen so it doesn't cut my pants or me. I'm not sure yet how fair I can expect him to fight.

When we come out of our meeting we tell Our Big Man what food we have left and send him off. There have been times when one of Our Men actually got a job in a grocery store. We suggest that. Money is not our way but we want him to know he's free to pick any way he thinks best.

After Our Man leaves, we wrap Grandma's legs in warm wet towels and feed her a special broth. She may guess what it is, but she drinks it willingly.

It's not so easy to steal in the daytime. I pass the place with the apples. I ask if I can take a few. Sometimes that works. The lady there says, yes.

Then I do as they said, I ask for a job in the grocery store. I don't need an address. I say I'm just passing through and need a job for a week or two. They put me to work. I won't dare steal for the first few days except maybe a pocketful from the bins.

When I return to the house at lunch time with beans and nuts and the apples, there's no sign of Grandma.

So much for Rosalia and me ever bringing her with us when my time is over.

I don't ask. It's not my place to know.

Second Grandma says she saw a man hovering about in the meadow beyond the house. She says she could hear him whistling a love song.

This is happening much sooner than I expected.

Grandma. . . *Grandma!* (It's going to be hard remembering to call Second Grandma, Grandma. It might have been better to do what they had to do up there, rather than have me carry Former Grandma all the way down here and dump her in the canal—that was icy water.)

Grandma says it again. "He was whistling a love song." She could be hinting that I have to make a show at defending my position.

I sneak out into the meadows. It's too soon for planting so there's nobody around.

I might be able to get it over with right here, now.

But there are two men out there, standing by a copse. A good place to hide, but they're not bothering to hide. Hard to tell from this distance, but they look large. I wouldn't have a chance even with Our Boy. I don't dare go up to get him, anyway. If I leave, those two might take over and our group might split. And Rosalia is down here. We never talked about going off together, and this is the only life she knows, she might not want to come with me.

Once I was privileged to bring up the rear, Rosalia and I lost the habit of talking as we had before. I had too much work to do. Sometimes she came out to my shelter when I was too tired to eat. Brought me soup. Rubbed my sore back. (Former Grandma said it was all right.)

We know that one has to observe the formalities. That there can be no taking up more than your share of space, no eating more than your share of food, no harsh words, and especially no secret alliances, no favorites.

I don't want Our Boy to get mixed up with two big men. Coalition or not, if anybody's going to get beat up it has to be me alone.

Their hair is long and tied back in ponytails. They're wearing black leather motorcycle jackets. No sign of motorcycles, though.

They don't look like good material for bringing up the rear. I'm not even sure they're our kind. Maybe they heard about our ways and are trying to take advantage of it. They could beat me up, mate with everybody, and then take off. It wouldn't be the first time outsiders have done such a thing.

If they're not us, one way or another, I'll *have* to win.

I make a big circle around the copse and come into it from the rear. I'm thinking that's where the motorcycles are.

And I find them. I take the spark plugs and some wires and hide them



in a different part of the copse. I might have a little more bargaining power with that.

Of course they might really be us, brothers often form a coalition, and riding motorcycles is what many of us do in our roaming years, but it's safer to go with the idea that they're not us. And they're too chubby. With all our walking, we don't have a chance to get fat. And their hair is so long. We generally try to blend in with the conservative people. Also we'd have known better than to come in to us in our motorcycle jackets, though whistling a love song is exactly what we would do. I'm surprised these men knew to do that. Though maybe that was their warning to our women.

We know that women have ways. They are full of ancient and intricate lore. Many of their recipes go back a thousand years. There are secrets no man knows.

We're not supposed to have favorites. Former Grandma let things go too far. We may have to see to it that Rosalia keeps the proper distance, but, for now, we'll let her sneak around to find out what's happening. We asked others of us to go see, but no one else wanted to do it.

Rosalia came back and told us there are two men and neither of them is Ruthson. She said they don't look to be our kind.

I let the men see me as I leave the copse. "You're just the one we're looking for," they say.

They're not going to care that our group is split. All they want is me out of the way and one night with us. There's no bargain to be struck here and they're not going to be willing to wait.

Since they're not of us, and won't be staying, even if they beat me up, the group will still be my responsibility.

I say, "They're all yours."

They're suspicious. They look at me—assessing. No doubt taking in how small I am, how thin and stringy. Taking in how large they are.

"Smart man," they say.

Without a word, they head off towards the house we're hiding in. They've already found out which it is.

They're whistling that song: "Next to my yellow-haired girl, how good, how good it feels. . . ." I follow. They don't care. I'm as helpless as they know I am.

But surely they're not going to rush in and just . . . without even saying, Hello. I can just see it: tea first. If we have any left. Our best cups. Two big guys with tattoos.

They know none of us would dare call the police.

I look in the high little window in the front door. Just as I thought—though actually I *didn't* really think it: Tea time! And with my apples. My walnuts. How did the women convince those men to do that?

But the women down here in town are not our youngest ones. The men may back down when they see just five middle-aged women and five children. They'll be angry and they could take their anger out on me.

\* \* \*

We own nothing worth stealing. Our memories are our only treasures. There's only one reason men would come to us.

We invite them in. Sit them down. It has to be on the floor, we have no chairs. All of us come, each one holding a toddler. We serve things Our Big Man took a lot of trouble getting for us.

But here, coming up behind me, is Ruthson, the man the women talked of before.

We don't greet each other.

It doesn't usually happen like this. We always say the words of challenge and then shake our secret brother-to-brother handshake. (The women don't know it nor even of it.) The other will proclaim his worth as a father and I'll say, "If it can come to be." All this in a language so old and foreign, we hardly know what it means anymore.

He's a big red headed man. The kind of man Our Boy will become later on.

He says, "I'll come in with you, if you'll form a coalition."

"I accept, but when this is over, I want to leave. Beat me up, but not my legs and feet. I want to be able to walk away."

"Will do."

Even though I'm a small man, Ruthson and I prevail, no problem. All of us men are always in good shape. We know we're going to have to fight sooner or later if we ever want to be able to take up the rear of a group and keep it, so we spend a lot of time during our roaming years learning how to fight. You'd think, if they know about our way of life, they'd know that, but then they were only expecting one man.

We went to the edge of the copse to have our fight—out of sight of the townspeople and our women. We had to keep remembering this wasn't our kind of fight. We had to forget our rules: No killing, no maiming. They fought any way they wanted, kick to the groin, punch to the Adam's apple. . . .

But when they start getting in trouble—almost right away—one of them says, "It isn't worth it. Those cunts are all too skinny and too old. Did you see the one with her hair in a bun? She had a nose on her. And she hardly had any knockers at all. You get a choice here, nose or knockers."

They're talking about Rosalia.

I leap towards them, but Ruthson grabs me. "Let them go."

They turn and jump on their motorcycles.

Ruthson, still holding me, says, "Calm down. It's over."

Of course the motorcycles won't start. I forgot about the spark plugs. They try several times, then get off and turn to us. This is different, not just a little free sex with a bunch of women who won't go to the police. Now they're going to really fight. They take out switchblades. I only have my paring knife. Ruthson picks up a stone.

But I yell, "Hold it! If you kill me you'll never find out where your spark plugs are."

Ruthson will stay while I go into the woods to get them. He's a good and willing man. I was hoping for someone just like him to take over the

group. I like how he held me back after the men said those things about Rosalia. He was right.

But what to do? If I don't give them back those men will stay here and make more trouble, but even if I give them back they may attack us again. Why not?

And I'm still angry about what they said about Rosalia. Are *their* noses so perfect? Are *they* so handsome? Foolish thoughts, and over and over and over, as I scrabble under the fallen tree for the plugs and wires. And when I bring back the plugs are they going to be happy? Thank me? I don't think so.

Of course it'll take them some time to install them. We should get out of the way or we'll get run over on purpose. I wonder if we can get away fast enough.

When I come back to the edge of the copse, one of the men is lying on his back, relaxed. The other sits smoking, leaning against his motorcycle. Both have their helmets on. It's a wonder they didn't have them on for our fight. Obviously they didn't take us seriously.

Three women are standing across the field. Rosalia, wearing my shawl, is one of them. (She's the shortest. We're two of a kind.) It's a thrill to see her. Especially wearing that shawl. It's always been a sign between us, though I couldn't say exactly what it means.

I wonder if those men will try to run down the women. They're angry enough to try it. It's my job to keep them safe. But nothing will happen until I get there with the plugs. I walk slowly. I motion for the women to leave. They don't.

Ruthson is ready. You can tell by the way he's standing. And he still holds the rock. I'm sure he's thinking the group is already his. I as much as said so. He'll do anything to defend it, as will I.

I hand over the spark plugs. I even help install them.

And they do just what I expected—though I was hoping they'd come after us—they rev up, spew out great gobs of dirt, and head for the women. Ruthson and I chase after, but there's no hope of catching them. Ruthson throws the stone, but misses.

Our women scatter.

One of the men drives right over Rosalia.

We know that tides will come in higher than ever, landslides will cover the roads and carry away houses, trees will crash down, stars will fall.

Thank goodness the ground is muddy and soft. Even so her leg is clearly broken. I turn and think to run after the men, but it's hopeless. I kneel beside Rosalia. She's making a little mewling sound with every breath. I touch her shoulder. I don't say, "Are you in pain?" or, "What can I do to help?" I say what I've been wanting to say all this time. "Come with me."

Of course she doesn't answer and I can see that she's in pain. Or maybe that look on her face isn't pain but shock.

I apologize right away for asking such a thing.

The other two women run up to us. Thank goodness they didn't hear what I said.

\* \* \*

We are thought to be helpless without Our Big Man, but that's not so. The tea we served those motorcycle riders will have an effect, though not in time. Maybe an hour from now. A bad case of diarrhea. We were hoping to hold them off till then. We didn't realize Ruthson and Janeson would form a coalition and fight right then.

Janeson will have to set Rosalia's leg and we'll have to make the plaster cast. We don't go to doctors.

We bring him out some rags and pieces of wood for a splint. We give Rosalia some herbs to chew on.

Janeson covers his mouth with his hand. He's trying to hold back tears. We've always been worried about the way he and Rosalia are with each other, but of course that'll be over soon. We hope Ruthson won't play favorites, though we can't accuse Janeson of that. He tried his best to be fair. Even leaned over backwards so that sometimes Rosalia got less than the rest of us. We've all loved him. We hope Ruthson will be as sweet.

We help Janeson get Rosalia up on to his back. She's a skinny little thing, probably even lighter than poor Former Grandma. Rosalia rests her cheek next to his and hugs him. That's perfectly all right. Any of us would have done the same.

There's all this mud all over both of them and no water turned on in the house. We'll have to go out to the canal yet again today. Our little ones can help. They'll like that.

We have to be ready, also, for when Ruthson beats up Janeson. Perhaps we should make them have their fight up in the mountains with the rest of our group so Janeson can be healed and rest a bit while Ruthson takes over down here.

Ruthson and I do as Grandma says, fight up in the hills, and he does as I asked, saves my legs.

MaryEllenson hid and watched our fight, though he's not supposed to. I didn't tell on him. I did the same when I was around his age and I got myself kicked out of my group for it.

MaryEllenson is worried about Ruthson, and rightly so, but I tell him to stay young for a while. I tell him I wish I'd stayed in my group longer. But he doesn't want to go backwards into being Our Boy. It's hard to do after forming a coalition with a Big Man as he did with me, and even harder after looking after our group all by himself up here in the mountains. He may go off for his roaming two or three years early just as I had to, though with me, it wasn't of my own choosing.

They give me a few days to recover, but now Rosalia is down in town and I'm stuck here and, after they send me away, I won't be allowed to communicate with any of them.

Normally they would give me a bundle of helpful things, but I'm leaving secretly, before they do. There would be nice things to show me how they've felt about me. Now that I'm not part of the group they can give me all sorts of things. There might even be that shawl Rosalia knit. But I'm

going to break our rules and leave before they can give me anything. It's because of her I'm sneaking away.

But . . . and it's so hard to believe . . . I'm free! Actually free! I can do anything I want, go anywhere, or never roam again, never fight again, live as I please. . . .

Except I don't want to live without Rosalia. I'm going down to see if I can sneak in and find out how she's getting along with her broken leg. If there's anything blooming on the way, I'll pick a bouquet. It's early, but lower there might be flowers. She loves daisies and lupine and wild sunflowers.

I make it as I did before—in one day. Thank goodness Ruthson saved my legs. He must now sleep in the garage where I slept. I hope he's tired enough not to mind the bugs and dust. It was cold there, too.

I wait till dark. Before she was hurt, Rosalia was in with three others, but they probably moved her to her own room because of her leg. I wish I could have been here helping. They wouldn't have let me near her, but I could have found some special treats. If I couldn't find wild flowers, I would have bought some—or begged or stolen. I'd have brought her butter, tomatoes, apricots. . . . I wonder if I can find a way to give her what she needs once we get off by ourselves.

That is, if she'll come.

That is, if we can get away.

Odd to think she wouldn't be calling me Uncle anymore. If we're pretending to be man and wife, she'd better not.

Soon the candles are lit and I look in the windows. Rosalia is in a room alone just as I was hoping. That's the one room that had a dusty old bed left in it. Her leg is in an old-fashioned plaster cast. It's bulky and looks heavy. That might be a problem.

I try to raise the window but it's locked. I tap. Rosalia sees me. At first she doesn't recognize me. I must look a fright. Ruthson knew I needed to look badly beaten so as to prove that I'd been through a real fight to try to keep my group. He concentrated on my face, but he knew how to hit so I didn't lose any teeth or break my jaw. All of us men are careful about not doing any real harm at our inaugural fight. Still, it's been hard to eat. I try to smile, but it hurts too much.

Then she sees it's me. She probably recognizes my rag of a blue shirt that she's often darned and sewn buttons back on.

To get to the window, she has to move her leg with her hands. It falls off the side of the bed, bringing her down with it. She drags it to the window and lets me in.

We stand there hugging for a long time. As if we might never get another chance.

"Will you come?"

"Of course."

I would have to fight again if Ruthson catches us, and this time he wouldn't be so kind, nor would he need to follow our conventions.

We know that small things, one at a time, a little here, a little there, could end a life such as ours even though other herd creatures serve as good examples.

\* \* \*

I lift Rosalia back onto the bed.

I don't think I can carry her very far with this cast but I'm going to try.

I look for something to put things in to start packing up what Rosalia wants to bring but before I find anything, Grandma comes in.

She's so shocked at seeing me she drops the tea she's bringing. Good it was one of our tin cups.

She gives a squeak and waves her arms as if to erase me, then whispers, "Go. Get out the window. Fast. This is not to be even thought about. If you leave right now, I'll not tell the others."

I've obeyed her and Former Grandma all of my adult life, but now I won't. Before she can yell I hold her mouth shut. Rosalia's clothes are neatly piled on the floor next to the bed. I gag Grandma with one of Rosalia's stockings. I tie her hands behind her with the ribbon that had tied back Rosalia's hair. I tie her feet with the other stocking. Then I lift Rosalia off the bed and prop her and her leg against the wall. I lift Grandma up on the bed. With that cast, Rosalia is much heavier than Grandma.

And all the time Rosalia looks at me, wide-eyed. I hope it's not with horror, though it could be—or that I'm crazy, which I am.

I manage to get Rosalia and her leg out the window. I manage to carry her all the way to the copse in the field before I collapse. Even just that far is almost more than I can handle.

We hug again.

"Are you still with me? I'll take you back if you want me to."

"I want to go with you, but how can we? You can't."

"Stay here, I'll find some kind of wheels. I'll steal a car, a burro. Something."

"Uncle, please. The others . . . the town's people will be after you if you do and we'll be after you, too."

"Don't call me Uncle, call me. . . ." But I don't know what.

She says, "My love."

Such a shocking thing to say.

We stare at each other, both of us appalled. But it's true, this is what we've come to. Exclusive love. The most outrageous thing our kind can do. Except our love has been there right from the beginning. It's for her that I wanted to become part of the group in the first place.

How can I leave my love here by herself under these trees, helpless, while I go for some sort of transportation? And then we have no food or water and, and I just realize it, Rosalia hasn't much on. She's in her nightgown. What have I gotten her into?

"I'm sorry."

"I don't want anyone but you."

I lift her and take her farther into bushes to hide her.

"Marry me."

She starts to laugh. Here, half naked, broken leg, cold, no doubt wishing for that cup of tea she never got, she laughs. It's what I always liked about her.

"I'll find us a mule. Or what about a wheelbarrow?"

That makes her laugh even more.



\* \* \*

We find Rosalia gone out the window and Grandma in a shocking situation. We mustn't put up with any such behavior. Though we have loved Janeson, and he has been a perfect mate to all of us, self-centered love can't be tolerated. He knows we can't let this go. How can he put Rosalia in such a position? And she must have consented. They're both at fault. And such likeable people. It's a shame.

And when I come back with an old rusty gardening cart she laughs all the more. Says, "It's better than nothing."

"Or is it?"

I also stole some clothes off a line. Boys jeans and a shirt. I'll have to cut the pants leg to fit it over the cast. All I have is my paring knife for cutting it.

Our women never dress in anything but skirts. This will help to hide her.

Rosalia laughs at herself in these clothes. I say I like her in them. It's true, I do.

She says they came looking for her with flashlights, but she held as still as a fawn and they didn't find her. They called and warned and begged her, for her own sake, to come back, but she kept silent. They decided we had already left the woods.

We'd like to wait and find something to eat, but we start out on the little road that goes beside the canal. Thank goodness there's a pretty good moon. I worry the road may be too bumpy for somebody with a broken leg, and I don't have any of those secret-woman-herbs for pain, but if she's hurting, she doesn't mention it. Instead she says, "I'm so happy." I don't say how I feel, which is worried, but I'm happy that she's happy.

We don't rest till morning.

We have a meeting about them. We can't agree. We seem to no longer be "we," but a group of "I's. If we go after them, who to send? Who would carry the ritual sickle? Our group is so split it's impossible to consult with all of us at the same time.

We see doubt on our faces, as if, Let them go, they're old, what harm can they do?

Grandma is supposed to be the final word, but even she (and even after the way Janeson treated her), can't seem to decide what to do. Perhaps she will leave us and carry the ritual sickle herself. But how can she do what needs to be done to someone we've loved?

And now MaryEllenson has run away to begin his roaming years. With the group split, we needed him. Perhaps MaryEllenson feared Ruthson even though Ruthson told us he would accept the boy. His mother, Mary Ellen, won't be much good for a while. We'll let her take time off.

Later in the afternoon we start up again, and I dare to go out on the main road where it's smoother. Practically right away, a pickup stops for us when the driver sees me wheeling Rosalia along. You'd have thought he'd leave a couple of tramps alone (specially with one of them beat up

and the other with a broken leg) but he and his truck look as raggedy as we do.

"I can take you and your cart, too. Far as Williamsville."

That's a couple of hours down the road. It'll get us well away from the group and we won't be leaving tracks. I'll feel a lot safer.

I ask if my wife can ride in the front with him. (How good to be able to say, My wife.) "She'll be more comfortable there."

He helps me get Rosalia and her leg into the front seat.

He says, "Got yourself in a barroom fight, didya?"

"Sort of."

I and the cart ride in the back with two big sacks of potatoes. I hate to steal from somebody who's helping us, but I make a little hole and take—just one—for Rosalia.

The man lets us off at the near side of town just beyond a nice grove of broken down cottonwoods. I wonder if he knew we might want to camp-out in there.

We're both pretty hungry by now. (Not that we aren't used to being hungry). I don't have my knapsack and my sacks, but it won't be hard to find plastic bags lying around.

I back up the cart and wheel Rosalia into the cottonwoods. I have to clear out some of the underbrush before I can do it. Then I pull the brush back to hide her. I leave her the potato. We both know building a fire to cook it, what with all these fallen down dead cotton wood branches, would be a disaster.

I tell her I'm sorry to be putting her through all this, and she says it's what she's always, *always* wanted. And, anyway, she says, "It's not that different from our usual way of life except it's just the two of us."

One of us must think of herself as if "I" and leave, but which of us could bear to do it? We'll vote and someone will have to go.

But Grandma shuts herself away, back in that very room where she got tied up. When she comes out she says, no need to vote. She'll go. "But," we say, "you're our oldest one. Who best knows our secrets? Who will tell us what to do next? It was bad enough losing Former Grandma in a land where we don't even know where we are."

She says, "I'll return as soon as I can. And if I find MaryEllenson I'll try to convince him to come back for one more year at least. None of them can have gotten far, what with Rosalia's broken leg, and then MaryEllenson is so ignorant of the other life. He won't even know enough to change his name."

We pack a bag for her, make sure she has something warm for the nights, and she walks away. We have guessed they'll follow the canal. We have guessed Janeson will have found some sort of cart, perhaps a wheelbarrow, in which to push Rosalia along. Perhaps they'll get a ride in the back of a truck. They'll hide in wooded vacant lots. Later, out of habit, they'll go up into the mountains. They'll be looking, hardly meaning to, for the Hidden Valley, even though they know, as do we, that perhaps it doesn't exist.

Before I leave to get us something to eat, I use my paring knife and trim off some of Rosalia's cast. They made it thicker than it needs to be.

They didn't expect her to be traveling. She'll be able to swing it around easier now and she won't be quite so hard to carry.

This is a big town. Main Street must go on for a mile. I walk it, end to end, and then start back. At the smallest grocery store I ask if there are any over-ripe bananas they can spare, and they can. Also ripe avocados. While they're being so kind I use my sleight of hand and steal a small steak—right before their eyes.

We eat some of the bananas and avocados and then I wheel Rosalia out to the road. We want to find a place where we can build a fire to cook our food. I take a back road that seems to go around the town. We find a little park with fireplaces as if all set up just for us. It's late, so there's nobody around. We take a picnic table under an oak way at the back. Some of the fireplaces still have coals in them or half burned wood. I look for more wood. There isn't much around, but I find enough. We have a wonderful meal, the best in a long time. Then we sit at our table and watch the day fade. We have no plans for the night, but we don't care.

Rosalia leans her head on my shoulder. She says, "My dear," three times as if practicing. It doesn't come easy after all these years of not saying it. I have a hard time with it, too.

"My dear . . . my dear, you've been so good to us all these years. How can they begrudge you a life of your own any way you want to live it? How can they think this is wrong?"

"But they can. And they will. And it is wrong. Love of this sort is not for the likes of us."

"It doesn't feel wrong."

"Nor to me."

Then she says again, "I'm so happy."

We spend the night right there, Rosalia in the cart and I on the table. The police come and shine a spotlight around the park. We wake up and get ready to be thrown out, but they don't get out of their cars or shine their lights this far back.

In the morning we have a breakfast of leftovers—almost as good as before.

I carry Rosalia to the little bathroom shed. Her leg is much easier to manage since I cut some of the cast off.

We discuss what we never thought to discuss before: our future. Would we like a town like this or a little place in the mountains? Perhaps we should keep on looking for the Hidden Valley?

Rosalia says, "We're not towns people."

And I agree. "Except won't the others know that and find us all the more easily?"

Then she gasps and stares beyond me, wide eyed, and I turn, thinking they've found us already.

But here comes MaryEllenson. He's limping and dirty, his face tear-streaked. He looks as if he'll start to cry again any minute.

He told me he was thirteen but I didn't believe him. Now I even wonder if he's twelve. He shouldn't have left the group so soon. And boys his age are a big help. We were always sorry we only had one big boy left. Now he'll be ashamed to go back. They always are.

He collapses beside us. I bring him water from the faucet in the park. Rosalia pushes herself off the cart, leg first, wets a cloth and wipes his face.

It takes a while before he can talk and then it all pours out. "I lost you. I saw the truck pick you up. I walked all day. But it got dark. I didn't see your tracks again until this morning. I slept in those trees just before the town. I thought that's where you'd be. I thought we had a coalition."

Doesn't he realize everything has changed? That we're outlaws to our kind? That I and Rosalia are beyond all rules now? He shouldn't have anything to do with us. There's a ritual sickle on its way to my neck.

And since he found us so easily, that means anybody can. I was afraid of those cart tracks. I'll cut more off Rosalia's cast and carry her from now on. We should find a place in town to rest and let her heal. As soon as I get Rosalia settled, I'm going to spend a couple of hours wheeling that cart off in a wrong direction, toward the mountains. That should slow them down.

One must always shoo away the adolescent males and not let them come back until they learn the ways of fathers. That is: Strength, patience, affection, and labor.

MaryEllenson made Janeson's tracks even easier to follow. His shoes are so worn out I can see the print of his left big toe. He was sloppy while Janeson was careful.

I have the ritual sickle handy. I have the ritual cap. Under all my black, I'm dressed in red. I have loved Janeson, but if we let this kind of thing happen, it'll be the end of us all. I must do it and I must advertise it afterwards so all of our kind will know.

Before we start out we give MaryEllenson our last banana and a lesson. "You're. . . ." But what? "Bobby Ellison. I'm. . . ." What I used to be in my roaming years? ". . . John Johnson. And this is Mrs. Johnson. Or Aunt Rosalia if you'd like. I can still be Uncle, but Uncle Jack."

More lesson: "If they find us, *you're* safe. We're not."

With MaryEllenson helping, we move faster, first back to that grove of broken-down cottonwoods. But whoever is coming after us will know that's where we are. We'll spend the day here, at the edge of the road, not hiding. I'll go to town again and . . . Bobby will stay here. I give him the job of hiding the tracks of the cart.

This time I stay off Main Street. I'm looking for a place to bring Rosalia. I don't find one, but I have to move her. In town with its paved roads and sidewalks, we'll be able to hide better than in any vacant lot or along dirt roads.

There's a house with nobody at home and a garage that faces an alleyway in back. There's a boat in there, but room for us, too. That will make a good temporary stop while we look for something better.

At the other, bigger grocery store I get some too-old fruit and day-old bread, some milk that's out of date but only by a day. I palm some butter. We won't need a fire for supper.

After we eat, I hide the cart in with the tumble-down cottonwoods. I'll take it into the hills later. It's well after midnight before we take off for

the garage. Rosalia and MaryEllenson don't know enough about the other people to realize how odd we look to them. When I say we have to come into town in the middle of the night, they trust me.

I carry Rosalia. Her leg is much easier to manage than it was. Whenever a car comes we hide, but few cars come.

We bed down on the cement floor of the garage. We're so tired we can sleep anywhere. I think MaryEllenson . . . Bobby . . . is crying. I feel bad for him, but then I had to go through my roaming days all alone. I cried a lot, too. But he has us to help him—at least for a while.

If I reach out to him it would embarrass him, so I let him cry. Too bad he's big for his age. Everybody thinks he's older and expects him to act it. I never had that problem.

In the morning I climb up and look in the boat. I should have done that before. There are several flotation cushions in there. Tonight we'll sleep in luxury.

One of Bobby's jobs is going to be watching out for the people of that house coming home. And when they come, finding me and helping us get out of that garage. Though since it only holds their boat we may not have to hurry. Besides, we don't have anything to move but ourselves.

The people do come back, but they don't check on their boat and they don't use it. Only once does the owner come in to get some tools. He's so busy getting the tool that he doesn't notice Rosalia. She said she sat, again, as still as a fawn that's left alone.

In spite of my beat-up face and that I'm starting to grow a beard, I get a job in the little grocery store where they were so nice with bananas and avocados. With my first pay, I buy us underwear and shirts at the second hand store. Later I get blankets. I'm tired of living by stealing. I stole something for Rosalia, in case she's in pain and doesn't say so. I want that to be the last.

Bobby works in the grocery store part time and then goes around town asking for odd jobs. It's a good way for him to get to know the way the other people live. I tell him to keep an eye out for good places for us to move to. We want a place where we can stay put without fear of being found out.

We've been here under the boat a few weeks now. I've cut off even more of Rosalia's cast. Every evening I help her get used to walking. Best of all, she and I are beginning to appreciate being together without the group. We allow ourselves to show affection in front of Bobby. Our group always did show affection with children, but he's not seen that with grownups. I should talk to him one of these days. Maybe first let him see more of the way the others live. He'll see there are other possible ways of being.

Now we hold hands, sleep in each other's arms. When she's cold I put her on top of me so as to keep her off the cement floor. We've found a few secret times to make love, though we don't hold back on kissing in front of Bobby. He watches as if he doesn't know whether to be horrified or not. Would he reveal us to Grandma out of indignation? Does he know what revealing us would lead to?

His roaming years are starting off a lot easier than our usual way. Most of us go off alone. I'm glad he's with us. He's too young to be on his own and he's a good help. He's earned almost as much as I have. People feel

sorry for him because he's a skinny, ragged kid and always give him extra. We're not dirty, though, and our clothes are patched and darned. We have our ways to live up to. Rosalia has cut our hair.

When we want to cook we go up to that park with the fireplaces. It's one of our favorite spots. Now that it's warmer there are often people there. We don't always get our favorite table.

We find an unused shed not far from our park. It belonged to the park, for tools and such, but they have a new metal one right next to it and never bothered to take this old one down. It's smaller than the garage with the boat, but probably safer.

By now we have plastic bags with our extra clothes. Rosalia can hobble holding on to my arm. When we decide to move, she's walking well enough for us to take the long way round, along Main Street. We look in all the store windows. We sit on a bench and people-watch. My boss at the grocery store comes by and I introduce Rosalia. I say, "My wife."

He says, a man has been looking for me. Could they have sent Ruthson?

"Is it a big man with a scar on his forehead?"

"No, a thin little man. Hunched over."

Grandma! Perhaps it's just as well we're moving.

"I told him I didn't know where you lived, but if I'da known I wouldn'ta told, anyway. Come by the store. I'll have something for your wife."

He's a good boss. When we come by he has a little bag of fruit with flowers laid on top. I buy us hamburger and a can of beans. By now we have a pan.

We settle in. We find a way to bar the door. Bobby goes back and steals three of the boat cushions. He says he got too used to them. That family doesn't seem to use the boat so we can probably return them when we leave, before they notice they're gone. We don't want to stay in this town forever.

We have our corner and Bobby has his, though he seems to think he and I should be together and the woman should be set apart as it always is in the group. When there's a coalition the men are always together.

We set our bags in a row between us and Rosalia hangs up our towel to give us even more privacy though it's still not much. Even so, we do dare to make love there, after we think Bobby is asleep.

Did Bobby betray us on purpose out of disgust for the way we've been showing our love? Or did he wake up and was shocked at us actually making love right when he was there? If Grandma came by the store she'd have recognized him right away, though maybe not me, what with my beard. And with this easy life, I've gotten fatter. We all have. Rosalia . . . I suppose she's not beautiful and probably never has been, but I liked her looks from the beginning. Or maybe it was the look in her eyes . . . always interested. Maybe it was how she laughed. And now she looks healthier than ever, rested, calmer . . . Beautiful! At least to me. Perhaps it's the happiness I see on her face.

It was late and all the picnickers had gone home. We were at our favorite table looking up at the stars, our coals still glowing in the grill. We'd had steaks again, this time not stolen.



Rosalia sits on the bench and I'm sitting on the table. I pull her closer so she rests her head on my knee.

But someone all in black is standing at the far side of our oak tree—not moving, but I see the glint of what's left of our fire in her glasses and there's a flash of metal. I hiss a warning.

When she hears that she walks right up to us.

At first I don't recognize that it's Grandma even though I'd been warned she'd been dressed as a man.

She takes off a black hat and reveals the ritual red and gold cap of killing. She already holds the ceremonial sickle. Is it to be so soon?

She thanks MaryEllenson for doing his duty and predicts great things for him. She's sorry he had to see . . . love. She can hardly say the word. "This . . . behavior . . . and at your age." She tells him to return to the group. She says he's too young for his roaming years. She says there's no shame in coming back. Besides, he'll be a hero since he's saving our way of life. Then she begins talking in the old language. It's as if she's praying.

I interrupt her. I say, "Rosalia has done nothing. I forced her."

Of course she doesn't believe that for a minute.

"I've seen you both from the start. I predicted there'd be trouble. I'm not like Former Grandma. I wouldn't have let it go on as far as it did. But you've been a good Big Man. If you leave right now and don't ever come near us again, and if Rosalia returns with me, I'll say I did what had to be done in the way it had to be, and finished it to my own satisfaction. I'll not tell them how.

Rosalia whispers a "No" that's little more than a breath. It's as if she doesn't dare say, No, in front of a Grandma.

*Our ways are common to all herds. Common to horses, common to lions, and, in a different form, common to elephants. Even the beach master, lord of his beach, lives as we do. Even baboons. How did humans come to such unnatural ways?*

*It's important to preserve the sensible, the logical, and if not by us, who then?*

Rosalia says, "If he dies, I'll die with him."

After she says that, I feel ready to take on everybody. We *will* be together, one way or another.

I say, "But what if we *both* leave and *both* never come back?"

"Happiness isn't for those who break the covenants."

Grandma is still spry. She's a lot younger than her big sister, Former Grandma. She can do whatever needs to be done. But if I harm Grandma what will become of the group? Besides, though I liked Former Grandma best . . . (when there was no place to go, it was she who led us into the unknown with courage and wisdom) . . . even so, I do appreciate Present Grandma for all she's trying to do for our ways. I even appreciate how she had to leave the group and come chasing after me. This can't be a very pleasant task. But covenant or not, if I had to do it, I wouldn't.

I take the ritual position of submission. I bare my neck. But I'm not on my knees. I'm braced and ready.

When Grandma swings the sickle back in order to get a stroke powerful

enough, it's as if, until this very moment, the others didn't really understand that such a thing would happen, even Bobby who betrayed us.

Grandma pauses, says the ritual words. In that moment both MaryElenson and Rosalia jump forward.

I jump, too.

Who would have thought that Rosalia and I would find the Hidden Valley all by ourselves, and that I, myself, would become the guardian of it?

We find a road that's hardly ever used, and there's the need for an old man to watch the turnoff. There's a tumbledown cottage and a garden in need of care. Farther on, a cluster of cottages of stones the same color as the stone around them. Water runs down from three waterfalls just as described in our stories. A good place to die and be swept out to sea. We recognize it right away.

(First thing, even before cleaning up the garden and repairing the house, we put up a moon watching platform.)

To ourselves, we call our land The Place, all of us here do, but to others we call it Nowhere so no one will come by. As I watch our road I always say, "This other fork leads to Nowhere." Few people pass this way, I don't have to be on duty all the time. And the sign at the fork points left and says NOWHERE. Who would go there?

Rosalia doesn't call me Uncle anymore. She calls me Dear and Husband. It's good we're no longer wandering because Rosalia's leg never came quite right. She can hobble, but not far. I carry her when we go up into the hills to gather berries. I carry her to the river to wash the clothes.

Bobby lives with us, but he'll be moving on in a year or so. He wants to keep up the old ways. He wants his roaming years. But considering what happened he can't ever go near our old group. He was thinking of changing his name to Rosaliason, but Rosalia thought he would do better changing it to Janeson and be my nephew.

He's part of our secret. A big part. If not for him, I don't know what would have happened. And he knows where Grandma ended up. . . . At least she's headed towards the sea.

Rosalia wonders, should we go back and tell the others we found the Hidden Valley? But I don't think so. We'd get in trouble. I don't tell her, but, if they ever come to my crossroads, I'll pull my hat low, take my dollar, and send them in the wrong direction.

What we know so far is that, at death, a waterfall will do for sweeping us away, though an irrigation ditch might also serve for us to be swept out to some sea or other.

We never had a chance to give our Janeson his leaving gifts, among which was the shawl Rosalia knitted for him long ago. We feel bad about that. We know how much he loved it. Though if they're together (and we shouldn't hope for it, but secretly we do), she'll be knitting him another.

What we know is that even in the middle of nowhere, there's beauty when you least expect it: top a hill and suddenly whole fields of poppies as far as the eye can see, or wake up early to the smell of sage after a rain. . . . ○

**THE MERCHANTS' WAR**

By Charles Stross

Tor, \$24.95 (hc)

ISBN: 0-7653-1671-4

**T**he newest book in Stross's alternate-realities Family Trade series raises the tension several more notches.

Once again, the protagonist is Miriam Blackman, the Boston technojournalist who discovered (in *The Family Trade*, first in the series) that she is one of an aristocratic family from an alternate world with a quasi-medieval culture. Miriam, whose branch of the family has the inborn talent to shift between worlds, is now beginning to learn just how complicated her clan's dealings with our world are.

Having survived an assassination attempt that did manage to kill off several key figures in the kingdom of which her family is the leading progressive force (despite its Mafia-like treatment of political opponents), Miriam has ducked into a third alternate world she has discovered, hoping to find shelter. Not surprisingly, what looked like a good idea at first now turns out to have complications of its own.

In this installment, Miriam discovers that, while she was away, the society of this world—a staunchly royalist quasi-Victorian world in which the American Revolution didn't happen—has taken an even more oppressive turn. Her local friends are in trouble, and their political allies—the democratic underground—are at first suspicious of her. But she's short on op-

tions, so she needs to go along with their plans—which involve a transcontinental train ride to meet one of the anti-monarchist leaders.

Meanwhile, back on the “medieval” world, a full-scale war has broken out between Miriam's family and an even more conservative faction that wants to free itself of the world-shifters' influence. Looking for ways out of the cage that's begun to close around them, Miriam's relatives send out an exploration team, hoping to learn if there are still other alternate worlds to be explored. As it turns out, there is at least one—but we get only a few intriguing hints about it before a crisis forces the team's recall to deal with more pressing problems.

At the same time, on our Earth, the authorities have begun to learn more about the broad shape of the multi-world universe. What they already know gives them plenty of incentive to find out more. For one thing, the government has tipped to the idea that there are several whole worlds where the oil reserves haven't been tapped—if only they can get there.

Stross has taken the broad idea with which he began the series—I've heard it described as “Amber with economics as the science”—and expended it logically in several initially unexpected directions. The action continues to be compelling, with the author throwing in new surprises every time a reader thinks the story's about to settle down for an easy lope through a world that many writers would consider sufficiently interest-

ing to explore without searching for still more wrinkles. Of course, this one ends in still another blatant cliffhanger—so Stross addicts will just have to grit their teeth and wait for the next one in this series.

I'll be waiting with them.

## **THE AREMAC PROJECT**

**By Gerald M. Weinberg**

**Little West Press, \$23.95 (tp)**

**ISBN: 0-932633-70-6**

This one's a bit of a sleeper, a near-future thriller built around neuroscience and nanotech by one of the giants of the IT revolution.

The key characters are Roger Fixman, a near-genius Muslim-American engineering grad student, and his equally brilliant girlfriend/co-worker Tess Myers. Working for Professor Wyatt, an exploitative faculty member whose entire reputation rests on work he has stolen from his students, the pair develop a machine that can capture images from a person's memory.

As it happens, the FBI has a captured terrorism suspect, severely wounded in the latest of a series of bomb attacks that have ravaged Chicago. And Wyatt, who has been working with the FBI, sees a way to maximize his value as a government asset by developing his students' machine into a practical way to read the suspect's memories.

Weinberg throws a couple of curves right off the bat: first of all, Roger's family are thoroughly unlikely potential terrorists. Except for his cousin Azara, who has demonstrated for religious freedom for Muslims, they are more interested in running their businesses and leading a happy family life. Second, Tess is by a lot of measures even smarter than Roger—although she lags slightly behind his genius-level

engineering abilities, she is far more attuned to the way the everyday world works.

The major plot complication arises when Wyatt's FBI contacts press him to speed up the development of the memory-imager in response to an escalation of the terrorist attacks. Against their better judgment, Roger and Tess skip to trials with human subjects—Tess volunteers—and something goes wrong. Tess is suddenly paralyzed and incapable of communicating. Now Roger has to complete the project himself—while worrying whether Tess will ever get back to normal.

I'd describe Weinberg as more an "idea man" than a smooth stylist—but he has plenty of ideas, and a way of making them convincing. He has a likeable pair of protagonists, a supporting cast that manages to avoid stereotyping, and he contrives to keep a few plot surprises up his sleeve for the final showdown. Probably the closest comparisons among established SF writers would be Robert Forward and James P. Hogan. If that's your kind of reading fare, I suggest you give Weinberg a try.

## **PEBBLE IN THE SKY**

**By Isaac Asimov**

**Tor, \$24.06 (hc)**

**ISBN: 0-7653-1912-8**

An author who needs no introduction! Originally published in 1949, and now reissued by Tor, this is one of the first SF novels I ever read.

Although this early novel does share the broad historical setting of Asimov's other "Galactic Empire" novels, it was clearly written pretty much as a standalone. So we see the author, not in the process of filling in the chinks of a fully developed future history, but in the process of inventing it.

It is also, significantly, his first novel written *as a novel*, rather than by retroactively stitching together a group of shorter works meant to stand on their own, as was the case with the original "Foundation trilogy." For the first time, the author had a chance to build up a book-length plot from scratch, and to take advantage of the world-building possibilities of the bigger canvas.

The book begins by taking a more or less ordinary American of the twentieth century and flinging him into an unfamiliar world: a starting point common to SF almost as far back as you want to go. The act itself is done by a bit of hand-waving, under the time-honored rubric, "there are a lot of things science doesn't really understand." The point is, by the end of the first chapter, Joseph Schwartz, a retired tailor from Chicago, has traveled to the distant future of the first Galactic Empire.

Most readers of this magazine probably know what he eventually learns. Earth is not, as Schwartz naively expects, the capital of the empire. Rather, it is a backwater world, its natives despised by the galactic citizens sent to administer the colonial government. It is overcrowded, unproductive, and radioactive. Its ludicrous claim to be the original home of the human race is, to the rulers, just another indictment against its superstitious natives. And, as Schwartz learns all too soon, there is a law requiring everyone on Earth over the age of sixty to report for euthanasia. Schwartz is sixty-two.

Lost and confused, Schwartz is taken in by a farm family that for all its sympathy, sees him as a problem: obviously ill, at best a pathetic amnesia case. With considerable relief, they hand him over to a research sci-

entist working on a machine he believes may help increase Schwartz's memory. Gradually, Schwartz begins to learn the language, and something about the world he has come to.

Meanwhile, a galactic archaeologist, Bel Ardavan, has come to Earth to investigate its curious folklore traditions. He is convinced that it may be older than many of his colleagues believe and wants to dig for evidence. And in the background of all this, the rebels of Earth are planning to strike a blow against their oppressors.

I'll leave off any more plot summary in case some of you haven't read the book. (Lucky you!) What I do want to say is that this is a fine example of Golden Age SF when its authors were still discovering just how much could still be done with this gorgeous new literary medium that had metamorphosed out of the science fiction of their youth. At the time he wrote *Pebble*, Asimov was still a rising star, not yet thirty years old—and yet a ten-year veteran whose style and approach had been formed under the demanding tutelage of John W. Campbell.

On the other hand, as the first significant piece of work he didn't write explicitly for Campbell, *Pebble* is in some ways a look ahead to what Asimov would be doing in his next creative period. While it can be made to tie in loosely with the future history of his earlier books, the book really was an independent creation. (Asimov's later efforts to tie together almost all his book-length fiction always had the look and feel of a juggling act, to me.) It also foregoes the large arena of the Foundation series, confining the action to a single apparently unimportant planet—foreshadowing the title of his later short-story collection, *Earth Is Room Enough*.

Asimov's fictional output, taken as a whole, is varied enough that it would be hard to point out any single book as his best. I can say that *Pebble* is one that non-SF readers readily respond to; and, unlike most of Asimov's work of his last few years, it requires no knowledge of (or interest in) his other novels to get into it and enjoy the ride. For that reason, it might be the book to recommend to someone just beginning to discover SF and interested in finding out what one of its major figures wrote at the top of his game.

And, of course, for those of you who have read *Pebble in the Sky*, here's a very useful reminder of just how good Asimov was at the top of his game.

**ASIMOV'S SCIENCE  
FICTION MAGAZINE  
30<sup>th</sup> Anniversary Anthology**  
Ed. by Sheila Williams  
Tachyon, \$14.95 (tp)  
ISBN: 1-892391-47-3

This one's a sure bet—a selection of outstanding stories from three decades of the magazine you hold in your hands.

The stature of *Asimov's* over the years has pretty well guaranteed that its editors get first look at most of the best stuff being written at any given time. Oh, every editor can give you a list of the great stories somebody else got first. But I'd guess that Sheila Williams, like her predecessors, rarely has to worry about getting enough quality material to fill an issue.

The table of contents lists some of the most distinguished names of the modern era: John Varley, Robert Silverberg, Octavia Butler, Bruce Sterling, Isaac Asimov, Kim Stanley Robinson, Connie Willis, Jonathan Lethem, Mike Resnick, Ursula K. Le

Guin, Kelly Link, James Patrick Kelly, Michael Swanwick, Charles Stross, Lucius Shepard, Stephen Baxter, and Robert Reed. Three grandmasters, and a whole crew of "lesser" award winners—not a bad lineup.

Some of the stories are classics in and of themselves: Varley's "Air Raid," the harrowing inspiration for the movie *Millennium*; or Stross's "Lobsters," the starting point of his trademark "Accelerando" sequence; or Asimov's "Robot Dreams," one of his most thoughtful explorations of the border territory between machinery and humanity that his robots began increasingly to inhabit as he returned to the theme again and again over the years.

But in fact, most of these authors are of such stature that even a throwaway story would be something most readers would look forward to—not to suggest that there's such a thing as a throwaway from Le Guin, or Silverberg, or Willis. For that matter, with three decades of published stories to choose from, there wasn't much chance that the editor was going to have to settle for "filler," no matter how big the name of the author.

All of which means that you can pick this collection up and know that every story is going to be top quality. Loyal longtime readers of the magazine will of course have seen them all the first time around, not to forget that many of them have appeared in "Year's Best" collections. But this would be a great gift for anyone who enjoys SF; and it's certainly as good a one-volume history of the last thirty years as you could order up.

It's also good to see a top small-press publisher getting the chance to do a project like this. From recent evidence, publishers like Tachyon, Golden Gryphon, and Night Shade



are going to be very important in the future of the field. If you really want to keep abreast of the best new work, you might start bugging your local bookstore to stock their books—starting with this one.

## NEW THEORIES OF EVERYTHING

By John D. Barrow  
Oxford, \$29.95 (hc)  
ISBN: 0-19-280721-2

A new look at the central question in modern science: whether science can develop one master theory that can account for everything in the universe.

Barrow, an astronomy prof at Cambridge (and a Fellow of the Royal Society to boot), jumps into his subject with a look at the fundamental issues. The key areas of the subject, as he lays them out, are laws of nature, the starting conditions of the universe, the character of the forces and particles, the constants of nature, broken symmetries, organizing principles, selective biases, and categories of thought. Each of these is explained clearly and its implications carefully examined.

For example, in discussing laws of nature, he lists all the ways the universe, scientific laws, and God might be able to interact—including the possibility that any or all of the three do not exist. A lot of scientists are ready to dispense with the notion of God; it takes a brave one to look solipsism or chaos in the face and admit that the search for meaning might itself be an illusion.

One key question is whether our math is adequate to describe the deepest level of reality. After all, Gödel's incompleteness theorem holds that every mathematical system entails theorems that cannot be proved or disproved. Barrow finds a

way out of the apparent dilemma, suggesting that Gödel's insight, while true of pure mathematics, doesn't hold for the applied math that scientists deal in.

He even takes a stab at the ancient question of whether or not time and space themselves predate the universe—although he comes short of a definitive answer. That, of course, is the great problem: there are no definitive answers to most of the really big questions, only more or less promising approaches to them. One of the biggest difficulties is the fact that the universe we can observe is a small fraction of what is believed to exist. Nor can anyone be certain that the observable portion of the universe is typical of the whole—although scientists must assume so, to play the game at all.

The hot approaches to cosmology nowadays seem to be the various spinoffs of string theory—M theory, brane theory, and others that are frankly incomprehensible to those of us who can't do the math. The up-to-date cosmologist has to figure out what to do about the data showing that dark matter and dark energy—neither of which anyone really claims to understand—are the dominant components of the universe. Not to forget older problems such as the imbalance of matter and antimatter, or the still perplexing question of what was going on before the Big Bang, assuming that question even means anything.

Barrow concludes that no scientific theory can really account for everything. Yet this philosophic recognition is not a denial of the scientific enterprise, but a recognition that the universe, at bottom, is subtler than our tools for analyzing it. A good mental workout for those inclined to wrestle with the big issues.

**LIVES OF THE PLANETS**by **Richard Corfield****A Natural History of the Solar System****Basic Books, \$30.00 (hc)****ISBN: 0-465-01403-3**

This one's an overview of the solar system by an Oxford astronomer, with an emphasis on what robotic probes and landers have added to telescopic knowledge.

Corfield combines several different approaches here: a "pocket guide" to the planets, a history of astronomy, and a look inside the space programs of various nations. This produces some interesting juxtapositions: in the chapter on the Sun, the focus is first on Stonehenge, now considered to be a prehistoric astronomical computer; then the discussion shifts to the Hertzsprung-Russell diagram, used to classify stars by their luminosity and color; then to Galileo's work on sunspots; and then to the effect of sunspot cycles on terrestrial climate cycles. At each step, Corfield brings in a variety of scientific insights into the current understanding of the star that dominates our daytime sky.

Succeeding chapters follow the same unpredictable course. He's particularly good on the history of space

exploration, with full due given to the achievements of the Soviets on Venus, which we now know to be a hellishly hot planet with a corrosive atmosphere rather than the near-twin to Earth that generations of astronomers thought it must be, or the swamp planet fashionable in the 1950s.

Mars, the most fully explored of the planets except for our own, gets a good-sized chapter. But as the narrative approaches the outer planets, data becomes sparser and the chapters get shorter and more speculative. The moons of Jupiter get close attention as possible abodes of life, though, and some readers may be surprised at the diversity of the bodies in our system. There are fewer family resemblances than one might expect from a group of objects that originated at much the same time from essentially the same batch of raw material.

There are a few stumbles when Corfield makes references to fields outside astronomy, notably paleontology. But, on the whole, this is a well-done survey of a dauntingly broad body of material. Definitely recommended as a starting point for research on our current knowledge of the solar system. ○

We welcome your letters. They should be sent to **Asimov's**, 475 Park Avenue South, Floor 11, New York, NY 10016, or e-mailed to **asimovs@dellmagazines.com**. Space and time make it impossible to print or answer all letters, but please include your mailing address even if you use e-mail. If you don't want your address printed, put it only in the heading of your letter; if you do want it printed, please put your address under your signature. We reserve the right to shorten and copy-edit letters. The email address is for editorial correspondence *only*—please direct all subscription inquiries to: 6 Prowitt Street, Norwalk, CT 06855.

# SF CONVENTIONAL CALENDAR

A lot of the major East Coast conventions are coming up in the next two months as the winter season wraps up. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of con(vention)s, a sample of SF folksongs, and info on fanzines and clubs, send me an SASE (self-addressed, stamped #10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con 5 months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard.—Erwin S. Strauss

## FEBRUARY 2008

1-3—COSine. For info, write: c/o 1245 Allegheny Dr., Colorado Springs CO 80919. Or phone: (973) 242-5999 (10 AM to 10 PM, not collect). (Web) [firstfridayfandom.org](http://firstfridayfandom.org). (E-mail) [cosine@rialto.org](mailto:cosine@rialto.org). Con will be held in: Colorado Springs CO (if city omitted, same as in address) at the Best Western Academy Hotel. Guests will include: Mike Resnick.

8-10—CapriCon. [capricon.org](http://capricon.org). Sheraton, Arlington Heights (near Chicago) IL.

8-10—OwlCon. [owlcon.com](http://owlcon.com). Held at Rice University, Houston TX. For fans of gaming, fantasy and science fiction.

8-10—IlddCon. [ilddcon.com](http://ilddcon.com). Austin TX. Japanese pop-culture and animation convention.

15-17—Boskone, Box 809, Framingham MA 01701. (617) 625-2311. [boskone.org](http://boskone.org). Boston MA. Weber, Morrissey. SF.

15-17—Farpoint, 11708 Troy Ct., Waldorf MD 20601. [farpoint.com](http://farpoint.com). Marriott, Hunt Valley (Baltimore) MD. Trek, etc.

15-17—VisionCon, Box 1415, Springfield MO 65801. (417) 886-7219. [visioncon.net](http://visioncon.net).

15-17—KatsuCon, Box 79, Clarksville MD 21029. [katsucon.org](http://katsucon.org). Omni Shoreham Hotel, Washington DC. Anime/manga.

22-24—SheVaCon, Box 416, Verona VA 24482. [shevacon.org](http://shevacon.org). Holiday Inn Tanglewood, Roanoke VA. Joe Keener.

22-24—Con DFW, 750 S. Main #14, Keller TX 76248. [www.condfw.org](http://www.condfw.org). Dallas TX. General SF & fantasy convention.

22-24—ConNooga. [connooga.com](http://connooga.com). Chattanooga Choo Choo Hotel, Chattanooga TN. A "multi-genre" convention.

## MARCH 2008

7-9—PortmeirCon, 871 Clover Dr., N. Wales PA 19454. [portmeircon.com](http://portmeircon.com). Portmeirion, UK. "The Prisoner" TV show.

14-16—LunaCon, Box 432, Bronx NY 10465. [lunacon.org](http://lunacon.org). Hilton, Rye NY (near NYC). Carey, Klukas, Siclari, Howlett.

14-16—StellarCon, Box F-4, EUC, c/o UNGC, Greensboro NC 27413. [stellarcon.org](http://stellarcon.org). Radisson, High Point NC.

14-16—MillenniCon, 5818 Wilm. Pike #122, Centerville OH 45459. (513) 659-2558. [millenniCon.org](http://millenniCon.org). Cincinnati OH.

14-16—OmegaCon. [omegacon.com](http://omegacon.com). Birmingham AL. Ben Bova, Alan Dean Foster, David Drake, Stephen Brust.

14-16—RevelCon, c/o Box 130602, Houston TX 77219. [severalunlimited.com/revelcon/](http://severalunlimited.com/revelcon/). Adult media fanzines.

20-23—NorwesCon, Box 68547, Seattle WA 98168. (206) 270-7850. [norwescon.org](http://norwescon.org). Seattle WA. D. Simmons, Ciruelo.

21-23—MiniCon, Box 8297, Minneapolis MN 55408. [mnstf.org](http://mnstf.org). Minneapolis MN area. Reynolds, Barlowe, S. McCarthy.

21-23—Anime Boston, Box 1843, New York NY 10150. [animeboston.com](http://animeboston.com). Hynes Convention Center, Boston MA. Hugs.

21-24—UK Nat'l. Con, c/o Scarlett, 8 Windmill Close, Epsom Surrey KT17 3AL, UK. [orbital2008.org](http://orbital2008.org). Near London.

## APRIL 2008

4-6—Icon, Box 550, Stony Brook NY 11790. [iconsf.org](http://iconsf.org). State U. of NY, Stony Brook NY. Harlan Ellison, B. Malzberg.

4-6—OdysseyCon, Box 7114, Madison WI 53707. (608) 260-9924. [oddcon.com](http://oddcon.com). Radisson. P. David, G.R.R. Martin.

4-6—FILKOntario, 145 Rice Ave. #98, Hamilton ON L9C 6R3. (905) 574-6212. [filkontario.ca](http://filkontario.ca). SF/fantasy folksinging.

25-27—RavenCon, 9623 Hollyburgh Terr., Charlotte NC 28215. [ravencon.com](http://ravencon.com). Richmond VA. Hickman, Strauss (mef).

## AUGUST 2008

6-10—Dervention 3, Box 1349, Denver CO 80201. [dervention3.org](http://dervention3.org). Bujold, Stembach, Whitmore. WorldCon. \$175.

## AUGUST 2009

6-10—Anticipation, CP 105, Montreal QE H4A 3P4. [anticipationSF.ca](http://anticipationSF.ca). Gaiman, Hartwell, Doherty. WorldCon. US\$150+.

# CLASSIFIED MARKETPLACE

Asimov's March '08

Advertise in the world's leading science fiction magazines with our Analog/Asimov's combined classified section. Ad rates per issue: \$2.95 per word (10 word minimum), \$125 per column inch (2.25 inch maximum). SPECIAL INTRODUCTORY OFFER: Buy two ads and receive a third ad FREE. Send orders to: Dell Magazines, Classified Department, 475 Park Ave. S., 11th Floor, New York, NY 10016. Direct inquires to: (212) 686-7188; Fax (212) 686-7414 or email: [adsales@dellmagazines.com](mailto:adsales@dellmagazines.com)

## BOOKS/PUBLICATIONS

**BUYING SCIENCE FICTION** magazines, book collections. Will travel for large accumulations. Bowman, Box 167, Carmel, IN 46082.

**ENEMY MINE**, All books in print, Check: [www.barrylongyear.net](http://www.barrylongyear.net)

**DREADNOUGHT: INVASION SIX** SF comic distributed by Diamond Comics. In "Previews" catalog under talcMedia Press. Ask your retailer to stock it! [www.DreadnoughtSeries.com](http://www.DreadnoughtSeries.com)

**FOUNTAIN OF ECSTASY**, a fast-paced spiritual suspense science fiction novel that evokes the sinewy plot of *The Da Vinci Code*. See: [www.fountain-of-ecstasy.com](http://www.fountain-of-ecstasy.com)

### *The Sense of Falling* - Ezra Pines

Hal Duncan - intro

Mark Rich - art

US orders \$5

[www.electricvelocipede.com](http://www.electricvelocipede.com)



**PUBLISH YOUR BOOK ONLINE**, Third Millennium Publishing, a cooperative of online writers and resources, <http://3mpub.com>

## BOOKS/PUBLICATIONS

**SCIENCE FICTION STORIES**. For further information, call 514-739-2435.

**Like Analog? Discuss**, rate, and create a list of your favorite stories at <http://scifidb.org>. Contact [analog@g42.org](mailto:analog@g42.org) to discuss the site.

## PARANORMAL

**ALIEN ABDUCTIONS INCORPORATED IF THEY WON'T CONTACT YOU, CONTACT US!** <http://www.alienabductions.com>

## ANNOUNCEMENTS

**Alaska Writers Guild** call for entries for Ralph Williams Memorial Short Story Contest. Grand prize: \$5,000, division prizes of \$1,000, to be presented at 2008 Speculative Fiction Writers Conference, Anchorage, October 1-5, 2008. Two written critiques provided for each entry. Contest deadline: April 15, 2008. For guidelines and application, visit [www.alaskawritersguild.com](http://www.alaskawritersguild.com), or write to: 9138 Arlon Street, Suite A-3, Box 910, Anchorage AK 99507

## ASIMOV'S SCIENCE FICTION

Classified Department 475 Park Ave South, 11th Floor New York, NY 10016  
Call: (212) 686-7188 Fax: (212) 686-7414 [adsales@dellmagazines.com](mailto:adsales@dellmagazines.com)

# NEXT ISSUE

## APRIL/MAY DOUBLE ISSUE

Our October/November issue is the one that seems to get the most attention and, frankly, the April/May issue is tired of being overlooked. We don't play favorites with our issues, but we sympathized with April/May's plight and have obliged it by loading it full of excellent SF stories sure to grab your attention from the very first pages. To this end, the ever-popular **Kristine Kathryn Rusch** returns to the futuristic milieu of her story "Diving into the Wreck" in a new novella—this time, a mysterious zone affected by alien technology must be plumbed by a crack team of professional "divers" who may well find that no training could ever have prepared them for . . . "The Room of Lost Souls."

## ALSO IN APRIL/MAY

This is, as you must already suspect, not all. We take great pleasure in offering, after too long an absence, the latest story by **S.P. Somtow**, a haunting, lyrical tale of a troubled cleric investigating "An Alien Heresy." **Barry B. Longyear** also returns with his clever rumination on the inevitable affects of aging upon the writer with "The Advocate"; **Neal Barrett, Jr.** offers a witty, wise, and, most importantly, *weird* tale about the end of the world in "Slidin"; **Kathleen Ann Goonan** explores the consequences of a man's transformation into a "Memory Dog"; **Merrile Haskell**, making her *Asimov's* debut, posits that life might not be so easy under the employ of benevolent interstellar rulers in "An Almanac for Alien Invaders"; **Catherine Wells'** latest, "Ghost Town," presents the troublesome effects of time upon a recently returned space explorer; **Robert Reed** skulks around the neighborhood trying to get a subtle peek into the windows of "The House Left Empty"; one of science fiction's greatest, **Kate Wilhelm**, returns with a bittersweet story of young lovers destined to always be "Strangers When We Meet" the morning after; **Nick Wolven** makes his *Asimov's* debut with a moving tale examining the emotional difficulties faced in a completely customizable world in "An Art, like Everything Else"; and up-and-coming talent **Matthew Johnson** returns with an alternate history in which the tired, poor, huddled masses of the past must emigrate through time and adjust to a confusing new life in "Another Country."

## OUR EXCITING FEATURES

In his "Reflections" column, **Robert Silverberg** continues his explorations of classic SF by "Rereading Stapledon"; **Norman Spinrad** brings you "The Multiverse" in "On Books"; plus an array of pleasant poetry by many of your favorite poets. Look for our giant April/May issue at your newsstand on March 4, 2008. Or you can subscribe to *Asimov's*—by mail or online, in varying formats, including downloadable forms, by going to our website, ([www.asimovs.com](http://www.asimovs.com))—and make sure that you don't miss any of the great stuff we have coming up!

# A CAPTAINCY FORGED IN FIRE...

To stop a vicious  
pirate, Captain Sulu  
of the *U.S.S. Excelsior*  
must join forces with  
the Klingons...and  
begin a hunt that  
will stretch from one  
generation to the next.



STAR TREK

Published by  
Pocket Books  
A Division of  
Simon & Schuster  
A CBS Company



© 2008 Paramount  
Pictures Corporation,  
All Rights Reserved.



**CBS**  
Consumer Products  
a unit of CBS Broadcasting

Also available as an eBook.

TM, ®, & © 2008 CBS Studios Inc. STAR TREK and Related Marks are  
trademarks of CBS Studios Inc. CBS and the CBS EYE logo are trademarks of  
CBS Broadcasting Inc. All Rights Reserved.

[www.simonsays.com](http://www.simonsays.com)  
[www.startrek.com](http://www.startrek.com)



INTRODUCING

# TO LIVE WITHOUT WARNING

A new novel by Timothy LaBadie

Visit the web site for a chance to win a book or **\$1000!**  
[www.tolivewithoutwarning.com](http://www.tolivewithoutwarning.com)

**To Live Without Warning** is a story set in a future San Francisco, where public transportation is the only way to travel, and people with colds are required by machines called breathe-eraters to wear masks. Within this speculative fiction novel, there are aliens who disguise themselves as homeless people, and there are twins from an alien abduction, one human, one not, plus a virtual couple who live in a bungalow on a beach in a virtual Costa Rica who mix up their computer code to have a virtual child, and then there is a cat woman who can do all sorts of erotica with her tail, and a drummer who leads more than a band called Death, Ax and Grind.



For information on ordering this new book, visit [www.tolivewithoutwarning.com](http://www.tolivewithoutwarning.com)